

1 STATE OF MINNESOTA DISTRICT COURT

2 COUNTY OF RAMSEY SECOND JUDICIAL DISTRICT

3 - - - - -

4 The State of Minnesota,

5 by Hubert H. Humphrey, III,

6 its attorney general,

7 and

8 Blue Cross and Blue Shield

9 of Minnesota,

10 Plaintiffs,

11 vs. File No. C1-94-8565

12 Philip Morris Incorporated, R.J.

13 Reynolds Tobacco Company, Brown &

14 Williamson Tobacco Corporation,

15 B.A.T. Industries P.L.C., Lorillard

16 Tobacco Company, The American

17 Tobacco Company, Liggett Group, Inc.,

18 The Council for Tobacco Research-U.S.A.,

19 Inc., and The Tobacco Institute, Inc.,

20 Defendants.

21 - - - - -

22

23 DEPOSITION OF MURRAY SENKUS

24 Volume I, Pages 1 - 266

25

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1 (The following is the deposition of MURRAY
2 SENKUS, taken pursuant to Notice of Taking
3 Deposition, by videotape, at the offices of Womble
4 Carlyle Sandridge & Rice, Attorneys at Law, 200 West
5 Second Street, 1600 BB&T Financial Center,
6 Winston-Salem, North Carolina, on June 16, 1997,
7 commencing at approximately 8:32 o'clock a.m.)

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1 APPEARANCES:

2

3 On Behalf of the Plaintiffs:

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1 On Behalf of Plaintiffs Arch in Civil No.
2 96-5903-CN and Plaintiffs Perry in Civil No.
3 2-473-95:

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1 I N D E X

2	EXHIBITS	DESCRIPTION	PAGE MARKED
3	Rodgman 1077	North Carolina Protective	
4		Order, 40 pages	8
5	1078	North Carolina Order and	
6		Subpoena, 8 pages	8
7	1079	June 8, 1964 letter, Bright	
8		to Senkus, Bates 50094 5946	74
9	1080	November 4, 1970 letter,	
10		Senkus to Vassallo, Bates	
11		50199 0368-9	91
12	1081	December 22, 1971	
13		interoffice memorandum,	
14		Senkus to Vassallo, Bates	
15		50199 0318-9	116
16	1082	"INTRODUCTORY REMARKDS: BY	
17		DR. SENKUS," Bates 50395	
18		0745-50	137
19	1083	June 9, 1997 letter,	
20		O'Fallon to Redgrave, 9	
21		pages	159
22	1084	December, 15, 1969	
23		correspondence, Bates	
24		1001882748-9	171
25			

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1 1085 "SMOKING SATISFACTION,"
2 Bates 50152 5355-6 200

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4

5 A June 10, 1997 fax
6 transmittal, Knisely to

7 Avram, 12 pages 8

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1 P R O C E E D I N G S

2 (Witness sworn.)

3 (Plaintiffs' Exhibits 1077 and 1078

4 were marked for identification.)

5 (Senkus Exhibit A was marked

6 for identification.)

7 MURRAY SENKUS

8 called as a witness, being first duly

9 sworn, was examined and testified

10 as follows:

11 ADVERSE EXAMINATION

12 BY MR. O'FALLON:

13 Q. Could you please state your full name for the

14 record.

15 Please state your full name for the record.

16 A. Murray Senkus.

17 Q. And what was your date of birth?

18 A. August 31, 1914.

19 Q. Doctor --

20 MR. CRIST: Dan, if I can just interrupt

21 for a second, I've asked to have premarked as Senkus

22 Exhibit A a copy of a correspondence from Sheller,

23 Ludwig & Badey which consists, as I read it, of a

24 deposition notice and accompanying subpoena for

25 Dr. Senkus. Secondly, I think it's clear with

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1 respect to Minnesota, with respect to Arch; however,
2 I would like to have it put on the record, that an
3 objection by one is an objection by all, so that we
4 need not have people interposing objections
5 separately.

6 MR. MURRAY: Dan, it's my understanding for
7 the course of this deposition you'll be objecting and
8 we are not to interfere until you are concluded, so I
9 don't have a problem with that.

10 MR. CRIST: No problem with that.

11 MR. O'FALLON: One other issue I'd just
12 like to clear up -- this issue came up last week --
13 it's our interpretation of Minnesota's order, and the
14 Minnesota deposition is the first deposition to be
15 taken here today, that the defendants have two hours
16 among them to do redirect on Dr. Senkus; therefore,
17 if there's any defendant who wants to do redirect
18 other than R.J. Reynolds, I would suggest that you
19 talk to R.J. Reynolds' counsel and have them reserve
20 some time for you.

21 We had a situation last week where R.J. Reynolds
22 took up the full two hours; I did my recross; and
23 then another party decided that they wanted to do
24 some additional questioning. We objected to that and
25 will continue to object to that, and my suggestion is

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1 the best way to handle that is simply to make sure
2 that R.J. Reynolds or whoever's going to do the --
3 the bulk of the redirect take care of your questions
4 for you.

5 BY MR. O'FALLON:

6 Q. Dr. Senkus, I've had marked as Exhibit 1077 a
7 protective order that's been entered in this case and
8 also in the Minnesota case. It's my understanding
9 that you have read that protective order and signed
10 it.

11 MR. AVRAM: Correction: Mr. O'Fallon, he
12 signed the confidentiality agreements attached to
13 it.

14 MR. O'FALLON: You understand these are
15 protective orders; correct?

16 MR. AVRAM: Yeah, but the protective order
17 doesn't call for signing it.

18 MR. O'FALLON: Well you understand that the
19 protective orders, both of them, have sheets at the
20 back that -- that basically require you to swear that
21 you've read them and will abide by their terms;
22 correct?

23 MR. AVRAM: Yeah. I was just making a
24 point that the protective order has not been signed
25 by Dr. Senkus. The -- the --

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1 MR. O'FALLON: The addendum to the
2 protective order; correct?

3 MR. AVRAM: The confidentiality agreement
4 has been. The protective order's been signed by the
5 judge.

6 MR. O'FALLON: Well, the Minnesota
7 protective orders have been signed by our judge and
8 there's addendums to them; correct, sir?

9 MR. AVRAM: (Nodding head.)

10 BY MR. O'FALLON:

11 Q. You understand you're bound by these orders,
12 sir?

13 A. Yes.

14 Q. Okay. And you read them before you signed them;
15 correct?

16 A. Didn't read this order.

17 Q. Did you read the Minnesota protective orders
18 before you signed the confidentiality attachment?

19 A. I don't re -- recall reading -- reading any of
20 that.

21 Q. I'm going to mark as Exhibit 1078 a copy of the
22 order and subpoena in this case. Do you recognize
23 that document, sir?

24 MR. CRIST: Is that what you handed to me a
25 minute ago?

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1 MR. O'FALLON: Yes.

2 A. I remember getting a letter from Minnesota
3 telling me that I am to be deposed.

4 Q. Okay. And you understand that you're appearing
5 here today pursuant to a subpoena from the North
6 Carolina court; correct?

7 A. Yes.

8 Q. Were you ever asked to appear here voluntarily,
9 without a subpoena, sir?

10 A. Yes.

11 Q. And what was your answer to that?

12 A. I would appear to this subpoena here -- to this
13 deposition here.

14 Q. And who asked you whether you would appear
15 without a subpoena?

16 A. Well I was told that I would be deposed and I
17 agreed to be deposed and --

18 Q. When were --

19 When were you told that?

20 A. I don't recall the date.

21 Q. Well approximately.

22 A. Sometimes in April.

23 Q. Were you told that by Mr. Avram?

24 A. No, huh-uh.

25 Q. Were you contacted by some other attorney for

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1 R.J. Reynolds?

2 MR. CRIST: I object to the form of the
3 question. I think that you inferred in there that
4 Mr. Avram is an attorney for R.J. Reynolds Tobacco
5 Company.

6 MR. O'FALLON: No, I didn't. I asked
7 whether he was contacted by any other attorney for
8 R.J. Reynolds.

9 MR. CRIST: Same objection.

10 A. Will you repeat the question?

11 Q. Sure. Who contacted you about this deposition
12 first?

13 A. Well I got a notice in the mail that I would
14 be.

15 Q. Who's the first person who talked to you about
16 it in person or on the phone?

17 A. Well I had a notice in the mail.

18 Q. Yeah, I understand that. Who did you -- well
19 who did you first talk to about that notice?

20 A. Let me, I guess, get my dates straight. I was
21 first told I would be deposed, and I believe I got
22 the notice in the mail. I'm not sure about the
23 dates, --

24 Q. Okay.

25 A. -- the sequence.

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- 1 Q. Who first told you that you'd be deposed?
- 2 A. Mr. McDermott.
- 3 Q. And he's an attorney with Jones Day; correct?
- 4 A. Yes, uh-huh.
- 5 Q. And also an attorney for R.J. Reynolds;
- 6 correct?
- 7 A. Uh-huh, yeah.
- 8 Q. Okay. Mr. Senkus, have you ever had your
- 9 deposition taken before?
- 10 A. Yes.
- 11 Q. In what case?
- 12 A. It was the interference, patent interference,
- 13 with American Tobacco.
- 14 Q. Okay. In what year was that?
- 15 A. Oh, as I recall, might have been 1980.
- 16 Q. Have you ever had your deposition taken in any
- 17 other case?
- 18 A. Yes.
- 19 Q. What cases were those?
- 20 A. It was a case, interference -- no, infringement
- 21 suit with Philip Morris.
- 22 Q. In what year would that have been?
- 23 A. '84, '85. I don't remember the exact date.
- 24 Q. That's fine. Have you had your deposition taken
- 25 in any other case other than those two?

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- 1 A. I don't recall.
- 2 Q. Have you ever had your deposition taken in a
- 3 smoking-and-health case?
- 4 A. No, I haven't.
- 5 Q. What did you do in preparation for this
- 6 deposition?
- 7 A. Talked with my attorney.
- 8 Q. And are you referring to Mr. Avram?
- 9 A. Yes.
- 10 Q. What else?
- 11 A. There were others in the meetings also.
- 12 Q. Who else --
- 13 Well first of all, let me ask you, how many
- 14 meetings in total have you had?
- 15 A. Oh, I'd say anywhere from on the order of seven
- 16 or ten.
- 17 Q. Who else has been present in these meetings?
- 18 A. Are you talking about you want me to name
- 19 names?
- 20 Q. Yes.
- 21 A. Well Mr. Crist, Mrs. -- name is Forbes.
- 22 Q. Is that it?
- 23 A. Mr. Holton.
- 24 Q. Mr. Who?
- 25 A. Holton.

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- 1 Q. What firm is Mr. Holton with?
- 2 A. He's with Womble, uh-huh.
- 3 Q. Okay. Anyone else?
- 4 A. That's all I can recall.
- 5 Q. Approximately how many hours total did you meet
- 6 with these attorneys?
- 7 A. 25 hours approximate.
- 8 Q. Have you reviewed any documents in preparation
- 9 for your deposition?
- 10 A. At these meetings we looked at documents.
- 11 Q. When's the first time you looked at documents?
- 12 A. Must have been towards the end of -- I'm not
- 13 sure. Towards the end of April. Probably -- I --
- 14 I'm not sure. Maybe first of May. I don't -- I
- 15 don't know.
- 16 Q. Were you paid for your time in attending these
- 17 meetings?
- 18 A. I will not be paid.
- 19 Q. You were meeting voluntarily with the lawyers?
- 20 A. Yes, I was.
- 21 Q. Were there any non-lawyers present at any of
- 22 these meetings?
- 23 A. Any --
- 24 Q. Non-lawyers.
- 25 A. I don't recall.

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1 Q. Other than the lawyers, have you talked to
2 anyone else in preparation for your deposition?

3 A. I have not.

4 Q. You've not spoken to any former RJR employees?

5 A. I have not.

6 Q. What year did you retire from R.J. Reynolds?

7 A. 1979.

8 Q. And what was your position at the time you
9 retired?

10 A. Director of scientific affairs.

11 Q. Since retiring from R.J. Reynolds in 1979, have
12 you done any consulting work with R.J. Reynolds?

13 A. Not for R.J. Reynolds.

14 Q. Have you done consulting work for Womble
15 Carlyle?

16 A. Well, as of my return from Indonesia about 1887,
17 I'm now a consultant for Womble Carlyle.

18 Q. Okay. So since 19 --

19 MR. CRIST: Excuse me. I think you meant
20 19 -- 18 -- 1987.

21 THE WITNESS: '87, '87.

22 MR. CRIST: I think you said "1887," sir.

23 MR. AVRAM: You're not that old.

24 THE WITNESS: Did I say 1897?

25 MR. CRIST: That's what I heard and that's

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1 what the court reporter got down, so --

2 BY MR. O'FALLON:

3 Q. Since 1987 you've been a consultant with Womble

4 Carlyle?

5 A. Uh-huh.

6 Q. Do you have a written agreement with Womble

7 Carlyle?

8 A. Not at this time.

9 Q. Did you at one time?

10 A. Yes.

11 Q. And what did that written agreement provide?

12 MR. CRIST: Excuse me. I object to the
13 question. I think it's vague.

14 THE WITNESS: Beg your pardon?

15 MR. O'FALLON: He's stating his objection
16 for the record. You can continue to answer.

17 A. That I would assist in -- in -- as a chemist in
18 interpretation of whatever comes before me.

19 Q. What was the duration of that written contract?
20 How long did that contract last?

21 A. Oh, it possibly was not renewed, say, the
22 last -- within the last two or three years.

23 Q. Do you still have an oral understanding with
24 Womble Carlyle, however?

25 A. Yes.

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- 1 Q. And is your oral understanding with Womble
2 Carlyle basically the same as your written contract
3 was with Womble --
- 4 A. My oral interpretation would be somewhat the
5 same.
- 6 Q. Okay. And how much were you paid per hour for
7 your consulting services in 1987?
- 8 A. \$60 an hour.
- 9 Q. How much are you currently paid for your
10 consultant service?
- 11 A. I work anywhere from 60 to 65 hours a month.
- 12 Q. And you're still paid \$60 an hour?
- 13 A. Yes.
- 14 Q. Have you been working approximately 60 to 65
15 hours per month for Womble Carlyle since 1987?
- 16 A. Well at one time I worked more than that, but
17 the time was -- over the years was reduced, and in
18 the last four, five years has been holding at about
19 60 hours a month, 60, 65 hours a month.
- 20 Q. Although Womble Carlyle pays you this money, is
21 it your understanding that they in turn bill those
22 costs to R.J. Reynolds so that R.J. Reynolds
23 ultimately pays for these services?
- 24 A. I -- I don't know anything about that.
- 25 Q. Have you been asked to consult in relationship

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1 to the Minnesota litigation?

2 A. Could you repeat that question.

3 Q. You understand that the Minnesota litigation has
4 been going on since August of 1994; correct?

5 A. August 1994, I -- if it was initiated at that
6 time, I was not aware of the date.

7 Q. Has some of the work that you've been doing for
8 Womble Carlyle been in connection with or applicable
9 to the Minnesota litigation?

10 A. No, not as far as I know.

11 Q. Without going into specifics, generally what
12 type of services do you provide to Womble Carlyle?

13 MR. CRIST: Let me object. I think, Dan,
14 that by your question you're trying only to get a
15 brief description of what it is. To the extent you
16 want to get specific, I think you're getting into --

17 MR. O'FALLON: I'm trying to --

18 MR. CRIST: -- work product
19 inappropriately.

20 MR. O'FALLON: I'm trying to get what I'm
21 entitled to under the Minnesota court order, and
22 that's a general description.

23 MR. CRIST: Do you understand that,
24 Dr. Senkus? Just a general description is all he's
25 asking for.

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1 THE WITNESS: Yeah, a general description.

2 A. Well a question may come up where I would
3 provide for them information on -- for example, in
4 the -- say the FTC tar/nicotine reports, and I would
5 be keeping up with that, so that would be one thing I
6 was doing. And for a number of years I was on the
7 Tobacco Working Group of the National Cancer
8 Institute. The industry participated in that, and I
9 would be asked information in regard to what that
10 program entailed. And basically being a chemist and
11 understanding tobacco technology, questions may come
12 up regarding the chemistry of smoke and tobacco.

13 Q. You understood that the work and the services
14 you were providing to Womble Carlyle were being used
15 to defend R.J. Reynolds in smoking-and-health
16 litigation; correct?

17 A. Would you repeat that question.

18 Q. Sure. You understood that the services you were
19 providing to Womble Carlyle were being used to defend
20 R.J. Reynolds in smoking-and-health litigation;
21 correct?

22 A. I -- I didn't -- at any one time, I could not
23 have a direct connection with what they had in mind.
24 They just asked me general questions, so as far as I
25 know, I answered your question.

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1 Q. You understand that Womble Carlyle is one of the
2 law firms that's been defending Reynolds Tobacco in
3 smoking-and-health litigation for years; correct?

4 A. They have been defending, you say?

5 Q. Yes.

6 A. Uh-huh.

7 Q. Do you understand that?

8 A. Well as far as I know, they were not involved
9 in -- in any -- I don't know how to answer that
10 question. You -- are you asking me if they were
11 in -- in -- appearing in -- at trials and --

12 Q. Well let me ask you this: Was it your
13 understanding that the work you did for Womble
14 Carlyle was being done in anticipation or defense of
15 litigation?

16 A. I presume, yeah, uh-huh.

17 Q. Okay. Well what kind of litigation do you think
18 that was?

19 A. Smoking and health.

20 Q. So you understood that the work you were doing
21 was being used to defend Reynolds in
22 smoking-and-health litigation; correct?

23 A. Well as I mentioned, what I was providing the
24 attorneys is interpretation of chemical technology as
25 a chemist.

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1 Q. And was it your understanding that that
2 information was not being used to defend litigation?

3 MR. CRIST: Objection. It's been asked and
4 answered.

5 A. Well they asked me for information. I answer --
6 I gave them the information. What they did with that
7 was whatever they chose to do with it.

8 Q. How much have you been paid by Womble Carlyle
9 since 1987?

10 A. Well it's a long time. I don't have any record
11 of it.

12 Q. Why don't you give me your best ballpark
13 figure.

14 A. Let's see. This is now -- '87. No, it was
15 about '88, eight years.

16 Q. Well approximately how much per year do you
17 think you were making?

18 A. Well right now it's 40-odd -- thousand-odd
19 dollars, but you multiply 60 times 60 times 12,
20 whatever that comes to per year, 60 times 60 times
21 12.

22 Q. And that's currently; correct?

23 A. Yeah, uh-huh.

24 Q. And you used to make more than that?

25 A. At one time.

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1 Q. Okay. What was the most you ever made in any
2 one year from your consulting with Womble Carlyle,
3 give or take? I don't need exact --

4 A. 55, let's say. No, I guess more 50, 50.

5 Q. So since 1987 you've made somewhere between 40
6 and 50,000 dollars per year?

7 A. Yeah, uh-huh.

8 Q. That's been about ten years; right?

9 A. Uh-huh.

10 Q. So somewhere between 400 and 500,000 dollars
11 consulting with Womble Carlyle; correct?

12 THE REPORTER: Your answer?

13 A. Yes, uh-huh.

14 Q. Have you had any consulting arrangements with
15 any other law firms?

16 MR. CRIST: Let me just, before you move on
17 here, I believe that the witness considers this to be
18 personal and confidential information, and so I would
19 designate that as such on the record at this time.

20 MR. AVRAM: My -- is it my understanding
21 that the whole -- that the whole deposition is
22 confidential?

23 MR. O'FALLON: No, it is not.

24 MR. AVRAM: Is that correct?

25 MR. O'FALLON: No, it is not.

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1 MR. AVRAM: So it has to be specifically
2 designated?

3 MR. O'FALLON: There are specific
4 procedures. They're all in the Minnesota orders. If
5 you read them, you can --

6 MR. AVRAM: Mr. O'Fallon, we -- we are not
7 parties to the case, so the Minnesota order --

8 MR. O'FALLON: Sir, if you will read -- if
9 you will read that order right there, it attaches a
10 Minnesota notice of deposition that states
11 specifically that this deposition will be held in
12 accordance with the Minnesota orders. Now, if you
13 want to get the protection in Minnesota of the
14 confidentiality, I would suggest that you read the
15 various protective orders and in consultation with
16 R.J. Reynolds' attorney make the appropriate
17 designations as we go along here or after the
18 deposition, as is provided by the protective orders.

19 MR. AVRAM: Mr. O'Fallon, the subpoena, the
20 original subpoena, does not -- and even the
21 protective orders that are attached to the North
22 Carolina thing don't -- don't say a darn thing about
23 the confidentiality of salary information, personal
24 information that relates to Dr. Senkus, and he -- he
25 should have his privacy respected.

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1 MR. CRIST: In any event, I don't know that
2 we necessarily need to get into that kind of an
3 exchange, Mr. O'Fallon, but I did designate that, at
4 the witness's request, as confidential under the
5 terms of the order.

6 MR. O'FALLON: I understand that's your
7 position.

8 THE WITNESS: Beg your pardon?

9 MR. O'FALLON: I understand that's his
10 position.

11 BY MR. O'FALLON:

12 Q. Have you had any other consulting arrangements
13 with any other law firm?

14 A. Yes.

15 Q. What other law firms?

16 A. Shook, Hardy & Bacon.

17 Q. And when did you have a consulting arrangement
18 with Shook, Hardy & Bacon?

19 A. Oh, '81, '83, in that period, intermittently.

20 Q. Okay. And what were the provisions of that
21 consulting arrangement? Was there a written
22 agreement, by the way?

23 A. I don't recall. That's so far back.

24 Q. Okay. In general, what kind -- what were the
25 provisions of your consulting arrangement with Shook,

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1 Hardy & Bacon?

2 A. To assist in -- assist in formulation and assist
3 in improvisation and execution of some studies
4 relating to environmental tobacco smoke and --

5 Q. So -- I'm sorry, go ahead.

6 A. Environmental tobacco smoke.

7 Q. Okay. Did you have anything else to say? I
8 kind of jumped in.

9 A. No, huh-uh.

10 Q. So this was research that was being directed by
11 Shook, Hardy & Bacon; correct?

12 MR. CRIST: Object to the form of the
13 question.

14 A. No, no, it was not.

15 Q. Who was --

16 Who was doing the research?

17 MR. CRIST: Object to the form of the
18 question.

19 A. Well it was -- that research was kind of a
20 consortium of the industry to get some information on
21 environmental tobacco smoke.

22 Q. Who actually did the research?

23 MR. CRIST: Object to the form of the
24 question.

25 A. Battelle in Ohio State -- in Columbus, Battelle

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- 1 in Columbus.
- 2 Q. And who paid for the research?
- 3 A. I'm not familiar with the arrangement.
- 4 Q. Where were the results of the research sent?
- 5 A. Well, the results that were obtained -- and I
- 6 left that arrangement in 1983. The results were
- 7 looked at by the consortium to plan further work on
- 8 ETS, and I don't know what happened after that.
- 9 Q. Who was in this consortium?
- 10 A. Well the -- some of the other tobacco companies,
- 11 like Philip Morris and Lorillard.
- 12 Q. How about R.J. Reynolds?
- 13 A. And Reynolds.
- 14 Q. What other law firms were involved in that
- 15 research?
- 16 A. As far as I know, only Shook, Hardy & Bacon.
- 17 Q. So the results of that research were sent by
- 18 Battelle to Philip Morris, Lorillard and RJR?
- 19 A. They were shared.
- 20 Q. When you say "shared," who -- who made the
- 21 decision as to whether or not those results would be
- 22 shared?
- 23 A. Well it was at the beginning. It was understood
- 24 they would be shared, and so --
- 25 Q. Were those results published?

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1 A. They were very preliminary results and did not
2 warrant publication because they were very
3 preliminary results.

4 Q. Was the work continued?

5 A. I don't know because I left the country at that
6 time.

7 Q. Now that environmental tobacco smoke work, that
8 was work that all the countries felt a need to do in
9 the ordinary course of their business; correct?

10 A. I don't know how they felt.

11 Q. Well did --

12 Was it your understanding that they were doing
13 that kind of work on environmental tobacco smoke in
14 order to protect themselves from litigation?

15 MR. CRIST: Object to the form of the
16 question.

17 A. Insofar as I'm concerned, it's the kind of work
18 that is of interest to anybody in the business.

19 Q. It's actually the kind of work that the
20 business -- that the tobacco industry has an
21 obligation to perform; correct, sir?

22 MR. CRIST: Object to the form of the
23 question, calls for a legal conclusion.

24 A. Well you're asking me a question that is a
25 management question. I mean, I --

1 Q. You were in management.

2 A. Well not that time I was not.

3 Q. Well but you were in management much earlier
4 than that. Was it your understanding generally that
5 R.J. Reynolds had an obligation to the smokers to do
6 research to determine whether or not tobacco smoke
7 caused harm?

8 MR. CRIST: Objection to the form of the
9 question, calls for a legal conclusion. I also
10 object on the basis of improper opinion testimony.

11 A. You know, when I was in that work, I regarded it
12 as very interesting work, and so I --

13 Q. Did you believe your company, R.J. Reynolds, had
14 an obligation to do that type of work, work
15 concerning the safety of tobacco smoke?

16 MR. CRIST: Same objections.

17 A. Do I believe the company had an obligation,
18 you're asking me?

19 Q. Yes.

20 A. Uh-huh.

21 Q. I'm asking you what your understanding was.

22 MR. CRIST: Dan, I just want to carry
23 forward the same objections on --

24 MR. O'FALLON: Yes.

25 MR. CRIST: -- this line without just

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1 repeating them, if I may.

2 MR. O'FALLON: Actually, if you just state
3 "objection," that will do it.

4 A. Of course if you're in a business, you want to
5 find out as much information as you can about your
6 product.

7 Q. You have an obligation to do that; correct?

8 A. Well I -- I'm not one to judge obligation.

9 Q. Well someone at R.J. Reynolds need to judge
10 their obligations; correct?

11 MR. CRIST: Objection, same objections.

12 A. Someone at Reynolds, as you say. That's your
13 opinion.

14 Q. You don't believe that's true?

15 MR. CRIST: Same objections.

16 A. Naturally, you know, any -- anybody, it's for
17 them to determine whether or not they have an
18 obligation.

19 Q. "Them" meaning who, R.J. Reynolds?

20 A. Well, whoever it is.

21 Q. To the best of your knowledge, was the Battelle
22 work performed on behalf of the consortium of tobacco
23 companies and Shook, Hardy & Bacon ever published?

24 MR. CRIST: Objection to the form of the
25 question.

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1 A. Insofar as I know, I don't know.

2 Q. Was it typical for the various manufacturers to
3 collude together to obtain --

4 MR. AVRAM: Objection.

5 Q. -- research with their attorneys and then not
6 publish results?

7 MR. AVRAM: Objection.

8 MR. CRIST: Objection.

9 A. Well you're -- you're asking me a question
10 here. To begin with, the work I participated in was
11 very preliminary. At that time it did not warrant a
12 publication. Now what happened after that, I don't
13 know.

14 Q. It was typical for the lawyers to be very
15 involved in all of the industry's research; correct?

16 MR. CRIST: Object to the form of the
17 question, assumes facts not in evidence and contrary
18 to the record.

19 A. No, it is not, definitely not, no.

20 Q. It wasn't typical to have your litigation
21 attorneys, for instance, present at CTR meetings and
22 Tobacco Working Group meetings?

23 A. At some meetings, maybe, but it was not typical
24 at all. No.

25 Q. They would only get involved when the work was

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1 particularly damaging?

2 MR. CRIST: Objection.

3 MR. AVRAM: Objection.

4 A. Definitely not, no. I know definitely that is
5 not so.

6 Q. Okay. Other than working for Shook, Hardy --
7 oh, by the way, how much did you make in your work
8 for Shook, Hardy & Bacon between 1981 and 1983?

9 A. That retainer was part-time. It was like \$2,500
10 a month, as I recall. I --

11 MR. AVRAM: I'd like to designate that part
12 as being confidential, please.

13 Q. Did you have any other consulting agreements
14 with any other law firms during any -- at any time
15 after you left R.J. Reynolds in 1979?

16 A. Not that I can recall.

17 Q. Did you ever have any consulting arrangements
18 with Jones Day and Mr. McDermott?

19 A. No, huh-uh.

20 Q. How long have you known Mr. McDermott?

21 A. Oh, since 1985, '84.

22 Q. You never met him while you were at R.J.
23 Reynolds?

24 A. No, not when I was with Reynolds, no.

25 Q. Since 1979, have you had any contractual

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1 relationships with R.J. Reynolds?

2 MR. CRIST: I think you previously asked
3 him with respect to consultancies. You're now moving
4 beyond that, to something else?

5 MR. O'FALLON: I'm looking for any
6 contracts of any fashion with R.J. Reynolds
7 directly.

8 MR. CRIST: Are you asking for retirement
9 benefits too, Dan? That's what I'm confused about.

10 MR. O'FALLON: No. I'll -- I'll get into
11 retirement benefits separately.

12 MR. CRIST: Okay.

13 BY MR. O'FALLON:

14 Q. I mean, I -- I'll cover retirement benefits with
15 you in a minute here. I'm just looking for, for
16 instance, Dr. Rodgman, it was learned after a couple
17 of lines of questioning, had separate contracts with
18 R.J. Reynolds to provide services directly to R.J.
19 Reynolds on specific projects after his retirement.
20 Did you have anything similar to that?

21 A. Nothing like that, no.

22 Q. Okay. Did you have any kind of an arrangement
23 with R.J. Reynolds on an ongoing basis -- basis?

24 A. Well in connection with the interference with
25 American or infringement, I was asked to appear on

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1 behalf of Reynolds --

2 Q. Okay. Were you paid for that?

3 A. -- in the depositions.

4 Yeah, I was paid for that.

5 Q. Okay. You were paid for that. And that would

6 also have been true then with the litigation against

7 Philip Morris? Were you also asked to appear there

8 by R.J. Reynolds?

9 A. Yes, uh-huh.

10 Q. And you were paid for that by R.J. Reynolds

11 directly?

12 A. I don't know exactly, but anyhow I was paid one

13 way or another.

14 Q. Do you have any other kind of arrangements with

15 R.J. Reynolds whereby people from R.J. Reynolds will

16 call you up for advice or assistance or as a

17 resource?

18 A. Absolutely not.

19 Q. Do you have access to any of R.J. Reynolds'

20 libraries or staff or offices?

21 A. I have maybe visited once or twice, but very,

22 very little.

23 Q. Have you been given any additional benefits

24 other than your normal retirement benefits by R.J.

25 Reynolds, such as an office or a staff or a

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1 secretary?

2 A. Absolutely not.

3 Q. Why don't you detail for me the retirement
4 benefits you have received since 1979, and what I'm
5 asking for right now is just a general description of
6 what you receive.

7 A. Well I receive a retirement fee or whatever.

8 Q. Okay. What else?

9 A. That's all.

10 Q. Do you also receive health benefits?

11 A. Oh, yeah, I receive that, and I have an
12 insurance policy, death policy.

13 Q. Any stock options?

14 A. I did not have any, I mean, when I left them.
15 If I have any stock, I bought it since then.

16 Q. Okay. But you don't have any, there's no
17 provision in your retirement agreement that allows
18 you to exercise certain stock options over the --

19 A. Unfortunately not.

20 Q. Especially in about 1988; right?

21 MR. CRIST: Let the record reflect
22 laughter.

23 Q. 1988 or 1989's a year that a fair amount of
24 people in this town got pretty rich from a leveraged
25 buyout of R.J. Reynolds; correct?

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1 MR. CRIST: Object to the form of the
2 question and to its relevance.

3 A. You say that they benefited from a -- yeah.

4 Q. That was the year of the leveraged buyout;
5 right?

6 A. Yes, uh-huh.

7 Q. What do you receive in retirement benefits per
8 month approximately?

9 A. \$2,900.

10 MR. AVRAM: Request that be kept
11 confidential or marked confidential.

12 Q. Other than attorneys or R.J. Reynolds Tobacco,
13 have you done any other consulting work since your
14 retirement in 1972 for anyone?

15 A. Well I was involved in research in Indonesia for
16 five years.

17 Q. And which five years were that -- were those?

18 A. '83 through '87, eighty -- '88.

19 Q. And for what company did you do that research?

20 A. Djarum, D-j-a-r-u-m.

21 Q. What kind of a company is that? What does that
22 company do?

23 A. A cigarette maker.

24 Q. Is it a subsidiary or affiliated --

25 A. It's a wholly-owned family company.

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- 1 Q. Okay. Not affiliated with R.J. Reynolds?
- 2 A. None whatsoever.
- 3 Q. And what kind of work did you do there?
- 4 A. Well I went over there to help establish a
- 5 research department and -- and got it going.
- 6 Q. What kind of research did that research
- 7 department do during your tenure?
- 8 A. Oh, largely to -- essentially it -- it
- 9 established a laboratory, and basically what we did
- 10 was did a quality control operation and did some
- 11 blending work.
- 12 Q. Did you have any animals in that lab?
- 13 A. None.
- 14 Q. So was it purely a chemical lab?
- 15 A. Well chemical technology lab.
- 16 Q. Did you have a confidentiality agreement with
- 17 R.J. Reynolds prior to the time you left R.J.
- 18 Reynolds?
- 19 A. Yes, I did.
- 20 Q. Was that in effect once you left?
- 21 A. Was it in effect when I left?
- 22 Q. Yes.
- 23 A. I don't remember how it read exactly, but it was
- 24 customary that, say, after one or two years you'd be
- 25 free to your own agent -- to be your own agent.

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1 Q. Okay. So did you have to get any kind of
2 special clearance from R.J. Reynolds in order to do
3 this work in Indonesia?

4 A. No, I didn't.

5 Q. Have we now covered all the work, consulting
6 work or any kind of other work, that you've done
7 since 1979 after leaving R.J. Reynolds?

8 A. Insofar as I can remember.

9 Q. And at the current time you are still an ongoing
10 consultant to Womble Carlyle; correct?

11 A. Yes, I am.

12 Q. I'd now like to talk for you briefly about your
13 career with R.J. Reynolds, and I think the easiest
14 way to do this is to start from the end and go
15 backwards.

16 MR. CRIST: Dan, if this would -- if you're
17 moving to a new area, could we take just a
18 five-minute break?

19 MR. O'FALLON: We can take a five-minute
20 break.

21 THE REPORTER: Off the record, please.

22 (Recess taken.)

23 BY MR. O'FALLON:

24 Q. Dr. Senkus, I'd next like to cover some of your
25 history with R.J. Reynolds, and I think the easiest

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1 way to do this would be to start at the -- at your
2 last position, the position from which you retired,
3 and then move backward.

4 I believe you stated that in 1979 you were the
5 director of scientific affairs; correct?

6 A. Yes.

7 Q. How long had you held that position?

8 A. Well from seven -- oh, from seventy -- '75,
9 someplace in there, until '79, till I retired.

10 Q. What were your duties and responsibilities as
11 director of scientific affairs?

12 A. One thing I did, took up considerable time, is
13 attending meetings of -- of the industry,
14 representing the company in -- in those meetings.
15 Also, I was consulted on giving my advice on tobacco
16 technology matters; like in the formulation of a new
17 brand, they would ask for my opinion on those
18 matters.

19 I also represented the company in what
20 eventually was called INFOTAB in -- in Brussels, and
21 I was -- went there as a kind of an advisor and set
22 up a library there. I attended meetings that were
23 held by the -- I think it could have been the
24 American Cancer Society throughout the United States
25 or just -- auditioned those meetings and reported to

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1 the company what was discussed.

2 That pretty well covers my responsibilities in
3 that function.

4 Q. As director of scientific affairs, who was your
5 immediate supervisor?

6 A. The president of the company.

7 Q. And who were the presidents of the company that
8 you reported to from 1975 to 1979?

9 A. William Hobbs, H-o-b-b-s.

10 Q. And did you have a staff?

11 A. No, I did not.

12 Q. Did you have a secretary or anything like that?

13 A. I had a part-time secretary.

14 Q. So not only were you director of scientific
15 affairs, you kind of were scientific affairs, I take
16 it. I mean, you were that department; right? I
17 mean, was that a department --

18 A. Essentially, yes.

19 Q. Did you do any work at the direction of lawyers
20 as director of scientific affairs?

21 A. No, I did not.

22 Q. So none of your work from 1975 to 1979 was done
23 at the direction of lawyers; correct?

24 So none of your work from 1975 to 1979 was done
25 at the direction of lawyers; correct?

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1 A. Was not. No, was not, no. No, it was
2 essentially done at the direction of William Hobbs.

3 Q. And from 1975 to 1979 as director of scientific
4 affairs, you were not assisting in the defense of
5 litigation; correct?

6 A. I was not.

7 Q. You said that you attended numerous industry
8 meetings, and I take it there were numerous industry
9 groups that -- that you were part of. Can you just
10 tell me, to the best of your recollection, what those
11 industry groups were that you were a part of?

12 MR. CRIST: Object to the form of the
13 question.

14 A. One group was the CORESTA group, which is an
15 international group. Members are some 101 tobacco
16 organizations throughout the world, and Reynolds was
17 a member of that. And I was the company
18 representative to CORESTA at those meetings, and we
19 had frequent meetings.

20 Q. Okay. You mentioned INFOTAB. Was that an arm
21 of CORESTA?

22 A. INFOTAB was another organization in Brussels
23 that was also international.

24 Q. What was its function?

25 A. As near as I can remember, it was mainly to

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1 respond to government actions regarding advertising,
2 that sort of thing.

3 Q. In general, would that society oppose any
4 advertising restrictions?

5 MR. CRIST: Object to the form of the
6 question, object to its relevance.

7 A. I'm -- I wasn't aware of any opposition. I feel
8 they simply interacted with the government on a
9 question of -- of advertising.

10 Q. What other industry groups do you recall being a
11 part of during that time?

12 A. Of INFOTAB?

13 Q. No, other --

14 A. Oh.

15 Q. Aside from CORESTA and INFOTAB --

16 A. Uh-huh.

17 Q. -- you're -- it's my understanding that you
18 attended numerous other industry meetings on behalf
19 of R.J. Reynolds.

20 A. Well, for example, Tobacco Research Chemical
21 Conferences.

22 Q. Okay.

23 A. And at these meetings were largely papers by
24 tobacco companies discussing analytical procedures,
25 which the industry shared.

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1 Q. Okay. Any other groups?

2 A. Not that I can recall at this time.

3 Q. Were you a member of CTR from '75 to '79?

4 MR. CRIST: Object to the form of the
5 question.

6 A. Was I a member?

7 Q. Yeah. Were you one of the R.J. Reynolds
8 participants?

9 A. I went to meetings of CTR.

10 Q. From '75 to '79 when you were director of
11 scientific --

12 A. I did attend some of those meetings, yes.

13 Q. Were you familiar at all with the special
14 projects portion of CTR?

15 A. I'm familiar with some of the special projects.

16 Q. Okay. Now special projects are projects
17 undertaken by CTR that are basically directed by the
18 industry and the industry's lawyers; correct?

19 MR. CRIST: Object to the form of the
20 question.

21 A. No, not lawyers, no, huh-uh, definitely not.

22 Q. It's your testimony that there is not a portion
23 of CTR, a special projects division, where the
24 lawyers have input?

25 A. They had input in some respect, but as far as

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1 the special projects themselves were concerned,
2 lawyers did not play an important role in identifying
3 special projects.

4 Q. The lawyers that were involved with CTR included
5 Shook, Hardy & Bacon; correct?

6 MR. CRIST: Object to the form.

7 A. Let's see now. Wait a minute. They may or may
8 not have. I don't know.

9 Q. How about Jacob, Medinger & Finnegan?

10 A. They may have, yeah, uh-huh. But it's to be
11 understood, you know, that in no way did they decide
12 the nature of the project. That was not their
13 decision.

14 Q. And the industry also had input into the special
15 projects; correct?

16 MR. CRIST: Object to the form of the
17 question.

18 A. The decision, say, on a special project came
19 from within CTR management. There were other people
20 there besides the advisory board.

21 MR. O'FALLON: Let's take a two-minute
22 break.

23 THE REPORTER: Off the record, please.

24 (Recess taken.)

25 BY MR. O'FALLON:

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1 Q. Dr. Senkus, I'd like to show you a document
2 that's dated April 16th of 1982. It was marked as
3 Plaintiffs' Exhibit 1056 in the Rodgman deposition.
4 It's Bates stamp numbered 50154 1374 through 1379,
5 and specifically I'd like to refer you to the last
6 page of that document.

7 MR. CRIST: May I see it just one second?

8 MR. O'FALLON: Certainly.

9 MR. CRIST: Thank you.

10 MR. O'FALLON: Okay.

11 BY MR. O'FALLON:

12 Q. Do you know who Mr. DiMarco is?

13 A. Yes.

14 Q. And you're familiar with Dr. Rodgman and the
15 other gentlemen who drafted this particular memo?

16 A. Let's see. Beside --

17 Q. Do you see the "From" column there?

18 MR. SCHEINER: Object to the form.

19 A. Rodgman, Giles, Colby, Nystrom.

20 Q. Are you familiar with those people?

21 A. Yes.

22 Q. Okay. I've asked you to look at the last page
23 of the document, which is attached as Appendix A.
24 Would you please start reading that document starting
25 here, the first full second paragraph.

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1 MR. CRIST: Object to the form of the
2 question.

3 Q. Why don't you read it out loud for us, sir.

4 A. Okay. "The most important effort by the
5 American Industry is made through the Council for
6 Tobacco Research-USA in New York. This organization
7 handles generally two types of projects: ... General
8 projects approved by an independent peer review group
9 of scientists, the 'Scientific Advisory Board.'"
10 That's A. "b) Special projects generally initiated,
11 discussed and approved by industry counsel and/or
12 outside litigating attorneys from firms such as
13 Jacob, Medinger ... Finnegan; Shook, Hardy & Bacon."

14 Q. Okay. Let me see that document real quickly.

15 So this document would indicate, would it not,
16 sir, that CTR had special projects that were
17 initiated, discussed and approved by the industry's
18 litigation attorneys; correct?

19 MR. CRIST: Object to the form of the
20 question.

21 A. Well now that -- that's what that document says,
22 but --

23 Q. And --

24 And you would agree that Dr. Rodgman and Dr. or
25 Mr. Giles and Dr. Colby and Dr. Nystrom are people

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1 who would make truthful statements in memorandums
2 such as this; correct?

3 A. Oh, yeah, I don't doubt that statement, that --
4 what they made.

5 Q. And presumably if they were going to attach some
6 information to a memo, they would also attach
7 accurate information; correct, sir?

8 MR. CRIST: Object to the form of the
9 question.

10 A. Now say that again.

11 Q. If they were going to attach information to a
12 memo in the form of an appendix, they wouldn't attach
13 incorrect information; correct?

14 MR. CRIST: Same objection.

15 A. Now what information are you referring to?

16 Q. I'm referring to Appendix A, sir, which is --

17 A. Yeah, okay, uh-huh.

18 Q. -- entitled "CURRENT SMOKING-HEALTH RESEARCH
19 VEHICLES," where it says, preceding what you read,
20 that there are -- "Two types of projects are funded
21 by the Council for Tobacco Research. There are also
22 plans under consideration for RJRT to commit
23 substantial funds to fundamental research on diseases
24 alleged to be associated with smoking."

25 So this appendix that you just read from that

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1 talked about the special projects at CTR being,
2 quote, "initiated, discussed and approved by the
3 industry," this is talking about RJR and CTR's
4 smoking-health research vehicles; correct?

5 MR. CRIST: Object to the form of the
6 question.

7 A. Yes, I understand that. The thing that -- I'm
8 referring now to my participation and my knowledge of
9 the thing at that time, say, through 1979. It was my
10 understanding that the special projects were highly
11 targeted projects to be done in addition to what was
12 approved by SAB, highly targeted special projects
13 that would have been of interest to the industry.

14 Q. Similar to the project that you consulted on
15 with Shook, Hardy & Bacon in 1981 through 1983;
16 correct?

17 MR. CRIST: Object to the form of the
18 question.

19 A. Not necessarily, not -- not that I can recall.
20 The one I recall, for example, is a special project
21 on effect of smoking on stress, and so we talked
22 with -- with an organization in Montreal who was an
23 authority on stress as to can we set up a special
24 project dealing with the subject of stress. And --
25 and there were some other projects that were

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1 contemplated but not necessarily put in operation,
2 but the -- remember this is I'm talking about my
3 involvement as through 1979. Now what happened after
4 that, I don't know.

5 Q. You're not stating that the information
6 contained in Plaintiffs' Exhibit 1056 is inaccurate,
7 are you, sir?

8 MR. CRIST: Object to the form of the
9 question.

10 A. Well it says what it says.

11 Q. And again, the people who wrote that memo are
12 people who do not typically put inaccurate
13 information in memorandum; correct?

14 A. I don't expect them to. But -- but I'm not
15 that -- you know, not up to me to judge.

16 Q. Other than CTR, were you involved from 1975 to
17 1979 with any other domestic industry-wide committees
18 or organizations other than the ones we've already
19 discussed? I know we've been through some.

20 A. Now what period are you talking about?

21 Q. We're -- we're back to --

22 We're back to the period that we've been talking
23 about, the period from 1975 to 1979 when you were
24 director of scientific affairs.

25 A. Okay.

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1 Q. You've testified that one of your functions
2 there was to attend industry meetings on behalf of
3 R.J. Reynolds, and we've just been trying to get a
4 complete list, to the extent you recall it, of the
5 various industry meetings and industry organizations
6 you were RJR's representative.

7 A. Uh-huh.

8 Q. And we've talked about, you know,
9 internationally CORESTA and INFOTAB. You've talked
10 about the chemists, and we've now talked about CTR.
11 Are there any other organizations where you served as
12 RJR's representative during this 1975-to-1979 period
13 that you can recall?

14 A. That I -- I cannot recall any right now.

15 Q. What was your job title prior to 1975, before
16 you became director of scientific affairs?

17 A. Well '64 through '75, 6, I was director of
18 research.

19 Q. And what were your duties and responsibilities
20 in that job?

21 A. Well during that time we continued to study,
22 say, composition of tobacco, composition of -- we
23 studied composition of smoke, had to do with make
24 sure that we had a good quality control laboratory,
25 and that came under my supervision. We

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1 investigated -- tried to discover new flavorants for
2 tobacco.

3 Q. Did you do any bench-level work during this
4 period?

5 A. No, I did not.

6 MR. CRIST: I'm not sure he --

7 Q. And again just so -- just so the record's clear,
8 when we're talking about bench-level work, I'm
9 talking about in the laboratory, --

10 A. Yeah.

11 Q. -- hands-on chemical analysis.

12 A. Handle test tubes.

13 Q. Right.

14 A. No.

15 MR. CRIST: Before we move on, I'm just not
16 sure whether or not he was able to complete that
17 previous answer, the one before "Did you do any
18 bench-level work during this period?"

19 Q. You didn't do any bench-level work during that
20 period; correct?

21 A. Actually working with hands in a laboratory, I
22 did not.

23 Q. How many people reported to you from --
24 approximately in this 1964-to-1975 period?

25 A. I'm -- I'm guessing 400, 500.

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1 Q. And who did you report to?

2 A. I reported -- at various times I -- I reported
3 to the vice president in charge of research and
4 development as --

5 Q. Who -- I'm sorry.

6 Who was that when you reported?

7 A. That was -- to begin with, was Willard D.

8 Bright.

9 Q. In what year was that or years were that that
10 you reported --

11 A. Starting in '64 through '68, someplace in
12 there.

13 Q. Who was the next vice president of research and
14 development that you reported to?

15 A. Well for a while I reported to Alex Galloway,
16 who was president of the company.

17 Q. How --

18 What was that time period?

19 A. Well it was subsequent to Bright leaving. It
20 might have been a year or a year or two, something
21 like that.

22 Q. So the 1969-to-1970 period you reported directly
23 to the president of the company, Mr. Galloway?

24 A. After '69, president of the company.

25 Q. Okay.

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1 A. And then --

2 Q. Then who did you report to after that?

3 A. To E. Vassallo.

4 Q. And what was his title?

5 A. Vice president in charge of research and

6 development.

7 Q. And what time period did you report to

8 Mr. Vassallo?

9 A. Here I'm guessing again. It was about like 1969

10 through 1970, '72, someplace in there.

11 Q. Okay. And who did you report to after that?

12 A. Mr. Hobbs, the president of Reynolds Tobacco.

13 Q. Is it safe to say that during the entire time

14 that you were director of research you either

15 reported directly to the president or you were just

16 one step removed from the president?

17 A. Yes, uh-huh.

18 Q. Did you have responsibility for the Mouse

19 House?

20 MR. CRIST: Object to the form of the

21 question.

22 A. Will you please explain what "Mouse House"

23 means.

24 Q. There were some biological laboratories that

25 R.J. Reynolds had from approximately 1967 to 1970 --

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- 1 A. Yes.
- 2 Q. -- including animal laboratories; correct?
- 3 A. Yes.
- 4 Q. And were --
- 5 Some of the animals there, did they include
- 6 mice?
- 7 A. Yes, yeah.
- 8 Q. Okay. What other animals were in that
- 9 biological lab?
- 10 A. There were gerbils and rabbits, may have been
- 11 rats. I'm not sure.
- 12 Q. And mice?
- 13 A. Yeah.
- 14 Q. Okay. Prior to 1964, what was your job title?
- 15 A. I was assistant director of research.
- 16 Q. And how long did you hold that position?
- 17 A. 1960 to 1964.
- 18 Q. And who did you report to in that position?
- 19 A. To Mr. K. H. Hoover.
- 20 Q. And what were your duties and responsibilities
- 21 as the assistant director?
- 22 A. To assist the director in the direction of
- 23 research.
- 24 Q. So it was among your responsibilities to
- 25 determine what types of research would be done?

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1 A. Advise, yes, uh-huh.

2 Q. Was that also part of your responsibility when
3 you were the director of research, to determine what
4 types of research would be done?

5 A. That was, yes, uh-huh.

6 Q. Were you ultimately responsible for initiating
7 or suspending research projects?

8 MR. CRIST: Object to the form of the
9 question.

10 A. I had played a role in initiation and played a
11 role in -- in any whatever you said, suspension.

12 Q. Okay. From 1964 to 1975 when you were director
13 of research, did you work at the direction of
14 attorneys?

15 A. Did not, definitely not.

16 Q. During that time period, did you do any work for
17 your attorneys?

18 A. Not for the attorneys.

19 Q. How about from 1960 to 1964 when you were the
20 assistant director of research? Did you have any of
21 your work directed by attorneys?

22 A. Did not, definitely not.

23 Q. Did you do any work for attorneys during that
24 1960-to-1964 time period?

25 A. No, I did not.

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1 Q. What was your job prior to 1960? Prior to
2 1960.

3 A. I was the director of chemical research.

4 Q. By the way, just to make a complete circle on
5 your duties as assistant director, did you do any
6 bench-level laboratory work --

7 A. No.

8 Q. -- as the assistant director?

9 A. I did not.

10 Q. Okay. How long were the -- were you the
11 director of chemical research?

12 A. From '51 through '60.

13 Q. And how large was your department as the
14 director of chemical research?

15 A. It started out with --

16 MR. CRIST: Let me just ask for
17 clarification. When you say "your department," do
18 you mean the research department, do you mean the
19 chemical research division?

20 MR. O'FALLON: I said he was director of
21 chemical research, so I assume that's --

22 A. It started out --

23 Q. Chemical research is a department; correct?

24 A. Chemical research --

25 Q. Was a department?

- 1 A. -- was a division of the department.
- 2 Q. Okay. So how big was -- was your division?
- 3 A. Well when I came in 1951 and they were just
- 4 starting up the research department, there were one
- 5 or two people that were doing some chemical research,
- 6 so they were assigned to me. And then that number
- 7 grew from 2 people to in 1960 -- I'd be guessing, I
- 8 don't know -- 35, 40 people.
- 9 Q. And what type of work did you do during that
- 10 period, 1951 to 1959? And first let me ask you what
- 11 kind of work did your division do, and then I'll ask
- 12 you specifically.
- 13 A. Chemical research involved study of tobacco,
- 14 analysis of tobacco, identification of components of
- 15 tobacco, identification of components of smoke, study
- 16 of flavoring of tobacco and then later study of
- 17 procedures involving -- I'd say dealing with some
- 18 issues that the industry faced in regard to tobacco.
- 19 Q. And those issues were the allegations that
- 20 cigarette smoke caused serious health problems in
- 21 humans; right?
- 22 A. The allegations.
- 23 Q. That's the allegations you were dealing with?
- 24 A. Well we -- we dealt with some of those
- 25 problems.

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1 Q. From 1951 to 1959 did you do any bench-level
2 work yourself?

3 MR. CRIST: Excuse me.

4 A. None whatsoever.

5 MR. CRIST: I just wanted clarification.
6 Do you mean '60?

7 MR. O'FALLON: Yes. Well I think --

8 A. I did not do any bench work whatsoever --

9 Q. Okay.

10 A. -- when I arrived at Reynolds.

11 Q. From 1951 to 1960 was any of your work directed
12 by attorneys?

13 A. There were not, definitely not.

14 Q. Did you do any work for attorneys during that
15 time period?

16 A. I don't recall.

17 Q. When did you first come to Reynolds?

18 A. September 22, 1951.

19 Q. Okay. And your first job then at Reynolds was
20 as director of chemical research?

21 A. Chemical research.

22 Q. What did you do prior to 1951?

23 What did you do prior to 1951?

24 A. I was with Commercial Solvents Corporation --

25 no, wait a minute. Prior to 1951 I was director of

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1 research and development for two years with a
2 company -- for a company in -- in Chicago.

3 Q. What was the name of that company?

4 A. Knox Rust Chemical Corporation, K-n-o-x, later
5 renamed Daubert Chemical Company.

6 Q. Where did you receive your undergraduate
7 degree?

8 A. At Saskatchewan.

9 Q. Okay. In what year did you receive your
10 undergraduate degree?

11 A. In 1930 -- no, 1930 -- undergraduate degree?

12 Q. Undergrad, yeah.

13 A. 1934.

14 MR. CRIST: Excuse me, Murray. It's a
15 little bit hard to hear when sometimes you put your
16 hand next to your mouth, so if you take it down, I'd
17 appreciate it.

18 A. '34.

19 Q. Okay. And where did you do your -- your
20 master's work?

21 A. At the University of Saskatchewan.

22 Q. Okay. In what year did you receive your
23 master's?

24 A. In 1936.

25 Q. And that was a master of science in chemistry?

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- 1 A. Master of science in physical chemistry.
- 2 Q. Okay. And where did you do your Ph.D. work?
- 3 A. At the University of Chicago.
- 4 Q. And what year did you graduate there?
- 5 A. 1938.
- 6 Q. And that was a Ph.D. in chemistry?
- 7 A. Yes.
- 8 Q. And what was your first job after graduating?
- 9 A. With Commercial Solvents Corporation.
- 10 Q. And what did Commercial Solvents do?
- 11 A. It was essentially a pharmaceutical company.
- 12 Q. Okay. And what was your first job there?
- 13 A. Worked in the laboratory.
- 14 Q. What was your title?
- 15 A. Chemist.
- 16 Q. How long did you remain with Commercial
- 17 Solvents?
- 18 A. From 1938 through '48, '49.
- 19 Q. And then you left Commercial Solvents to take
- 20 the job with a company now --
- 21 A. Knox Rust Chemical.
- 22 Q. I'm sorry?
- 23 A. Knox Rust Chemical Corporation.
- 24 Q. Okay. And you held that job for approximately
- 25 two years before --

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1 A. Two years, uh-huh.

2 Q. And then you came to R.J. Reynolds?

3 A. Yes, uh-huh.

4 Q. Okay. And during the entire time you were with

5 R.J. Reynolds, you didn't do any bench-level

6 research; correct?

7 A. Absolutely not, huh-uh, nor did I do any at Knox

8 Rust.

9 MR. O'FALLON: Okay. Let's go off the
10 record.

11 THE REPORTER: Off the record, please.

12 (Recess taken.)

13 BY MR. O'FALLON:

14 Q. Dr. Senkus, are you familiar --

15 (Discussion off the stenographic record.)

16 BY MR. O'FALLON:

17 Q. Dr. Senkus, are you familiar with an

18 advertisement taken out in 1954 by the tobacco

19 manufacturers, including R.J. Reynolds, entitled "A

20 Frank Statement to Cigarette Smokers"?

21 MR. CRIST: Object to the form of the
22 question.

23 A. Yes, I am familiar with.

24 Q. I'm going to have you take a look at a -- an

25 exhibit that's been previously marked as Sistas

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1 Exhibit Number 2. This document is entitled "A Frank
2 Statement" -- "Statement to Cigarette Smokers," and
3 it indicates that it was sponsored by numerous
4 tobacco manufacturers, including the R.J. Reynolds
5 Tobacco Company; isn't that correct?

6 MR. AVRAM: Give him a chance to read the
7 whole thing --

8 MR. O'FALLON: Sure.

9 MR. AVRAM: -- if you would, please, Dan.

10 A. Okay.

11 Q. The first paragraphs of this Frank Statement
12 talk about the recent reports on experiments linking
13 cigarette smoking to lung cancer; correct?

14 MR. CRIST: Object to the form of the
15 question. The document speaks for itself, and you
16 miscited it.

17 MR. AVRAM: Go ahead and answer.

18 A. That's what it reads.

19 Q. Yeah. And it indicates that those experiments
20 are inconclusive; correct?

21 MR. CRIST: Object to the form of the
22 question.

23 A. Let's see. Where -- oh, yeah, okay. Second
24 paragraph, it says results are inconclusive.

25 Q. And thus, it's casting doubt on whether there is

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1 a link between cigarette smoke and lung cancer;
2 correct?

3 MR. CRIST: Object to the form of the
4 question.

5 A. Whoever wrote this says "... we do not believe
6 that any serious medical research, even though its
7 results are inconclusive, should be disregarded or"
8 highly -- "lightly dismissed," so that's what -- what
9 it says here.

10 Q. Would you agree that from 1954 to the present
11 day the tobacco industry's public stance is that the
12 case against cigarette smoking and any links between
13 cigarette smoking and health problems is not proven?

14 MR. CRIST: Objection to the form of the
15 question.

16 MR. AVRAM: Objection.

17 MR. CRIST: I also object on the basis it
18 calls for improper opinion testimony.

19 A. Now what -- what are we -- what are we dealing
20 with here? Are you asking me to --

21 Q. I'm asking you your general knowledge of between
22 1954 to the present day, hasn't it been the tobacco
23 industry's position that a link between cigarette
24 smoking and any adverse health effects on man is not
25 proven?

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1 MR. CRIST: Same objections.

2 A. Well, at this particular time when this thing
3 was written, it was not proven.

4 Q. Okay. And today is it proven?

5 MR. CRIST: Objection, calls for improper
6 opinion testimony.

7 A. I'm not in a position to judge that.

8 Q. You have been the research director of a major
9 tobacco company for some 15 years, after which you
10 became the director of scientific affairs. Since
11 that time, you have continued to consult with the
12 industry, so you have some 40-odd years of experience
13 as a scientist in this industry. In your opinion, is
14 the -- is it more likely than not that cigarette
15 smoking causes adverse health consequences in man?

16 MR. CRIST: Same objections.

17 MR. AVRAM: Objection.

18 MR. CRIST: Object to the form.

19 A. It's -- it's a risk factor.

20 Q. Is it more likely than not that cigarette
21 smoking causes adverse health effects in man?

22 MR. CRIST: Same objections.

23 A. I -- as a -- as a chemist not dealing with the
24 medical aspects of this, I cannot comment on that.

25 Q. But you were also a director of scientific

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1 affairs for a time being. Do you have an opinion as
2 to whether cigarette smoking is more likely than not
3 to cause lung cancer?

4 MR. CRIST: Same objections.

5 A. No, I -- I -- I cannot -- as -- as a scientist,
6 as a chemist, I -- I do not -- I cannot comment on
7 that.

8 Q. Okay. So after 40 years in this industry --

9 A. Uh-huh.

10 Q. -- including many years as a director reporting
11 to the president of your company --

12 A. Uh-huh.

13 Q. -- and as a director of scientific affairs
14 reporting directly to your company, you have no
15 opinion as to whether cigarette smoking causes lung
16 cancer?

17 MR. CRIST: Same objections.

18 A. Well I have a very specific opinion that it is a
19 risk factor.

20 Q. Does that mean it's more likely than not that
21 cigarette smoking causes lung cancer?

22 MR. CRIST: Same objections.

23 A. I'm saying it's a risk factor.

24 Q. Is it more likely than not that it causes?

25 MR. AVRAM: Objection, asked and answered.

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1 A. I'm saying it's a risk factor.

2 Q. You understand the notion of scientific
3 probability; correct?

4 A. I'm not a -- "probability," I -- I think this is
5 kind of a statistical, mathematical term, and I
6 wouldn't know how to judge that.

7 Q. Some --

8 MR. CRIST: Dan, if I may -- and I don't
9 want to interrupt the questioning -- this man has
10 been noticed and subpoenaed as a fact witness.
11 You're now asking him opinion testimony. That's why
12 I've been objecting with respect to these questions,
13 and I just want to ask for a continuing objection;
14 otherwise, I'll just have to continue to interpose
15 it. If a continuing objection is fine, then we'll
16 just let you go forward, I won't have to interrupt.

17 MR. O'FALLON: You can have a continuing
18 objection.

19 MR. CRIST: Thank you.

20 BY MR. O'FALLON:

21 Q. Is it your testimony that as a scientist you
22 don't deal in probabilities?

23 A. As far as probability, improbability is
24 concerned, I haven't given that any serious thought.

25 Q. Have you given any serious thought to the issue

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1 of whether it's more probable than not that cigarette
2 smoking causes cancer?

3 A. I repeat it's a risk factor, and -- and that, I
4 believe, answers the question.

5 Q. Now at the time the cigarette manufacturers
6 placed this advertisement in papers around the
7 country, they didn't have to do that, did they?

8 MR. CRIST: Object to the form of the
9 question.

10 A. No. What -- what they had to do or not to do
11 was -- was not my -- I don't know.

12 Q. They made a choice to place this advertisement
13 in newspapers and state that, in the -- in their
14 opinion, in their belief, the belief of the tobacco
15 industry, that the link between cigarette smoking and
16 lung cancer was inconclusive; correct?

17 MR. CRIST: Object to the form of the
18 question.

19 A. Now this is January 1954.

20 Q. Right.

21 A. There was a lot said about it in the newspapers,
22 and I think even the medical people said it's -- it's
23 highly speculative and -- and there was no definite
24 proof for it, so I think the company was basing their
25 action on what was in the public domain.

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1 Q. But the company made a decision and made a
2 choice not to simply leave this debate up to medical
3 scientists, but to weigh in with their opinion on the
4 issue; correct?

5 MR. CRIST: Objection to the form of the
6 question.

7 A. I believe I've answered the question.

8 Q. In addition to taking a public stand on whether
9 they believed there was a causal connection between
10 cigarette smoking and lung cancer, the industry also
11 took on some specific duties in this advertisement;
12 correct?

13 MR. CRIST: Object to the form of the
14 question and on the basis that it calls for a legal
15 conclusion.

16 A. Where does it say that?

17 Q. Look on the second paragraph. Going down after
18 number four, it says, quote, "We accept an interest
19 in people's health as a basic responsibility,
20 paramount" --

21 A. Where does it say that, please?

22 Q. Do you see that? It's in the second column,
23 sir.

24 A. Oh, second column.

25 Q. Second column.

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1 A. Oh, yeah, I see that.

2 Q. Do you see it now?

3 A. Yes.

4 Q. Let me read it. It states, quote, "We accept an
5 interest in people's health" --

6 THE WITNESS: I lost this thing again.

7 THE REPORTER: Off the record, please.

8 (Discussion off the record.)

9 BY MR. O'FALLON:

10 Q. Okay. Let's go back to the second column. It
11 says, quote, "We accept an interest in people's
12 health as a basic responsibility, paramount to every
13 other consideration in our business." That's what it
14 says; correct?

15 A. That's what it says.

16 Q. And the "we" includes R.J. Reynolds Tobacco
17 Company; correct?

18 A. Yes.

19 Q. So R.J. Reynolds Tobacco Company is telling the
20 public that they accept an interest in people's
21 health as a basic responsibility, paramount to every
22 other consideration in their business; correct?

23 MR. CRIST: Objection to the form of the
24 question.

25 A. That's what it says.

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1 Q. Did they convey that to you as an employee of
2 R.J. Reynolds, that an interest in people's health
3 was your basic responsibility and that it should be
4 paramount to your interests at RJR?

5 MR. CRIST: Objection to the form of the
6 question.

7 A. If I had read that statement at the time, at the
8 time I would have accepted it as a proper statement.

9 Q. Okay. But my question is a little bit different
10 than that, Doctor, and it's: Did R.J. Reynolds make
11 sure that you as an employee of R.J. Reynolds knew
12 that R.J. Reynolds had made this promise to the
13 public and did they place upon you a duty or a
14 responsibility to make sure that you, as one of their
15 employees, carried out this responsibility that they
16 assumed?

17 MR. CRIST: Objection to the form of the
18 question, and it's loaded with legal terms, on which
19 basis I also object.

20 A. Well I as a scientist at that time considered
21 what would be expected of me to do whatever is
22 necessary to fulfill any responsibility that needed
23 to be carried out.

24 Q. And if there was ever an issue facing you where
25 on the one hand you had the people's health and on

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1 the other hand you had the economic interest of R.J.
2 Reynolds, did you understand it was up to you to make
3 sure that it was the health interests that
4 prevailed?

5 MR. CRIST: Object to the form of the
6 question.

7 A. Well to the extent of our capabilities, we would
8 have done whatever is expected of us under the
9 circumstances.

10 Q. You would agree that just reading this in
11 everyday parlance, that what the Frank Statement
12 does, what the industry has done in the Frank
13 Statement, is basically made a promise to the public
14 that they're going to place the interest in people's
15 health paramount to their own business interests;
16 correct?

17 MR. CRIST: Object to the form of the
18 question, calls for a legal conclusion, also calls
19 for speculation.

20 A. Well I feel, you know, throughout I think
21 Reynolds has carried on -- carried out its
22 responsibilities, that used whatever means were
23 conceivable at all times, used whatever means were at
24 our disposal, our capability, and we I think
25 responded to the -- to the allegations.

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1 Q. Sir, if -- if Reynolds truly placed the interest
2 of health above all of its other interests, it would
3 certainly make sure that if it had an article or
4 information in its possession that indicated that you
5 had found a deadly poison, such as hydrogen cyanide,
6 in smoke, that you would publish that information,
7 even if it might be to the detriment of the company;
8 correct?

9 MR. CRIST: Object to the form of the
10 question. That's argumentative.

11 A. Well as far as hydrogen cyanide is concerned,
12 it -- it was published in 1858 that hydrogen cyanide
13 is present in smoke. So it's present in smoke --

14 Q. Was it published by R.J. Reynolds?

15 A. Well after it's in the public domain, it's not
16 customary to republish a known fact.

17 Q. But wouldn't it carry more weight if it comes
18 from a company that's taken a public stance that, A,
19 the interest in people's health is their basic
20 responsibility and, B, that the products they make
21 are not injurious to health?

22 MR. CRIST: Object to the form of the
23 question, also object on the basis it calls for
24 speculation.

25 A. Well I would take this position, that -- that

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1 even in the 1964 Surgeon General's report, that any
2 material -- I would conclude from it any material
3 present in insignificant amounts does not affect the
4 smoker.

5 Q. Don't you think the public has the right to know
6 that hydrogen cyanide is in the cigarette smoke?

7 MR. CRIST: Objection to the form of the
8 question, --

9 A. Well it was in the public domain.

10 MR. CRIST: -- calls for a legal conclusion
11 and speculation.

12 MR. O'FALLON: Let's mark this as the next
13 exhibit.

14 (Plaintiffs' Exhibit 1079 was marked
15 for identification.)

16 BY MR. O'FALLON:

17 Q. I'm handing you a document that's been marked as
18 Exhibit 1079. It's an exhibit Bates stamp numbered,
19 I believe, 50094 9646.

20 MR. CRIST: I believe that's 5946, but I
21 could be wrong.

22 MR. O'FALLON: Oh, 5946. I believe you're
23 correct.

24 Q. Why don't you look at the marked copy, sir.

25 A. Yeah, uh-huh.

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- 1 Q. Do you recognize this document?
- 2 A. Yes, I do.
- 3 Q. This is a document dated June 8th of 1964;
- 4 correct?
- 5 A. Yes.
- 6 Q. This is a note to you from a Willard Bright;
- 7 correct?
- 8 A. Yes.
- 9 Q. Who's Willard Bright at this time?
- 10 A. He was vice president, director of research and
- 11 development at that time.
- 12 Q. Okay. And that's your handwriting at the top?
- 13 A. Yes.
- 14 Q. What you state here is that --
- 15 What Mr. Bright states to you is that he's
- 16 returning herewith the paper by Dr. Cundiff which was
- 17 prepared for possible submission to "Tobacco
- 18 Science"; correct?
- 19 A. Yes.
- 20 Q. Was Dr. Cundiff one of your people?
- 21 A. Let's see. This is '64. He was.
- 22 Q. And the article is "The Spectrophotometric
- 23 Determination of Hydrogen Cyanide in Cigarette
- 24 Smoke"; correct?
- 25 A. Yes.

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1 Q. And in fact, did Dr. Cundiff find the presence
2 of hydrogen cyanide in cigarette smoke?

3 A. No, he did not find it. It was already there.

4 Q. He confirmed that it was there; correct?

5 A. No, that's not the purpose of the paper. This
6 was an analytical paper describing an analytical
7 procedure for the determination of HCN in smoke.

8 Q. Hydrogen cyanide's a very lethal poison, is it
9 not?

10 MR. CRIST: Object to the form of the
11 question.

12 A. Well it depends on how -- how it's presented to
13 the individual.

14 Q. It certainly can be; correct?

15 A. Yes, in certain amount.

16 Q. Okay.

17 A. But --

18 Q. Mr. Bright con --

19 MR. CRIST: Excuse me.

20 MR. AVRAM: Let him finish the question,
21 please.

22 MR. CRIST: Or answer.

23 THE WITNESS: I forgot what I was saying.

24 MR. AVRAM: If you wanted to finish the
25 answer, you go ahead.

1 THE WITNESS: Okay, uh-huh.

2 MR. CRIST: You said, "Well it depends on
3 how ... it's presented to the individual. But --"

4 MR. AVRAM: Did you have anything else to
5 add?

6 THE WITNESS: Yeah.

7 A. If presented in -- if it's presented to the
8 individual in a large -- in a certain amount, it
9 could be a poison; but presented in very small
10 amount, it -- it is not a poison.

11 Q. And if that's what this paper said, then there
12 shouldn't have been any disadvantage to R.J. Reynolds
13 to have it published; correct?

14 MR. CRIST: Object to the form of the
15 question.

16 A. Now actually you must remember that this is an
17 analytical procedure that he described and that all
18 he would be publishing is an analytical procedure.

19 Q. And --

20 A. That's all he would be publishing.

21 Q. And Dr. Bright concluded it had technical merit
22 and would be a satisfactory contribution --
23 contribution to the literature; correct?

24 A. True, that's what it says here.

25 Q. Nonetheless, he decided that because the

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1 publication would not be advantageous to your
2 company's interest, that it wouldn't be published;
3 correct?

4 MR. CRIST: Objection to the form of the
5 question.

6 A. Actually I was not part of that decision. I --
7 I recommended that -- that it be published. It was
8 discussed by Dr. Bright with somebody else, and this
9 is what their -- I received from him, saying it will
10 not be published.

11 Q. But then you discussed it again on May 23rd --

12 A. Yeah.

13 Q. -- of 1966 and again agreed not to publish it,
14 so you were part of the decision-making process;
15 correct?

16 A. Well this -- this -- these particular -- it
17 happened that Dr. Markunas, whoever it was, was out
18 of town and, see, my point in this thing is that this
19 is an analytical procedure. It should be remembered
20 it's an analytical procedure, and I would speculate
21 as to why it would not be published, why it would not
22 be published, but it was already known that HCN's in
23 smoke, well reported.

24 Q. But it wasn't reported by a tobacco company, was
25 it, sir?

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1 MR. CRIST: Objection to the form of the
2 question, calls for speculation.

3 A. Well, see, the thing about -- well I don't
4 know. To publish or not to publish could be a
5 proprietary decision.

6 Q. You decided --

7 Dr. Bright decided it was simply not
8 advantageous to the company's interests? Apparently
9 it was not advantageous to have an RJR in-house
10 chemist talking about hydrogen cyanide in cigarette
11 smoke in the --

12 A. Yeah.

13 Q. -- published literature?

14 MR. AVRAM: Objection.

15 MR. CRIST: Object to the form of the
16 question.

17 A. I emphasize this is only an analytical
18 procedure.

19 Q. Well if it's only an analytical procedure, then
20 it ought to be fairly innocuous and there shouldn't
21 be any problem with publishing it; correct?

22 MR. SCHEINER: Objection.

23 A. Remember, you know, I got this from my immediate
24 supervisor that it is not to be published. As to
25 exactly the reason for this decision, I don't know

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1 what it was.

2 Q. I understand you were simply following orders,
3 but this was the order that came down; correct?

4 MR. SCHEINER: Objection.

5 A. That's what it reads.

6 Q. Now a company that truly had the health of the
7 public as its paramount interest would also trumpet
8 any new breakthroughs concerning the causation link
9 between cigarette smoking and lung cancer such as the
10 development of tumors in the lungs of dogs on
11 inhalation testing; correct?

12 MR. CRIST: Object to the form of the
13 question.

14 A. You see now, that's -- that was a long statement
15 you asked me.

16 MR. AVRAM: Will you repeat the question,
17 please.

18 MR. O'FALLON: Certainly.

19 Q. Now a company that truly had the health of the
20 public as its paramount interest would also trumpet
21 any new breakthroughs concerning the causation link
22 between cigarette smoking and lung cancer, such as
23 the development of tumors in the lungs of dogs during
24 inhalation testing; correct?

25 MR. AVRAM: Objection.

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1 MR. CRIST: Same objection.

2 A. Would publicize the -- you're saying public --
3 publicize the appearance of tumors in dogs, and I'm
4 not sure that that particular public -- that
5 particular finding was corroborated beyond any
6 doubt.

7 Q. So was that the standard, that it has to be
8 corroborated beyond any doubt?

9 A. Well I mean --

10 MR. CRIST: Objection to the form of the
11 question. I think he was asking for clarification.
12 I'm not sure.

13 MR. O'FALLON: No, he was making a
14 statement, but the record will speak for itself.

15 A. Well --

16 Q. Is -- is --

17 Is it your understanding that the level of
18 scientific proof that the industry has is the same as
19 we use to convict murderers in this country, beyond
20 any reasonable doubt?

21 MR. CRIST: Object to the form of the
22 question.

23 MR. AVRAM: Objection. Don't answer that.

24 MR. CRIST: That's inappropriate.

25 MR. AVRAM: Don't answer that. I instruct

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1 you not to answer that.

2 Q. Is that the level of proof that you require, 100
3 percent certainty?

4 MR. CRIST: Same objection.

5 A. As far as I can remember, that was way off
6 certainty.

7 Q. The truth of the matter is when Dr. Auerbach
8 reported that he had found squamous cell carcinoma in
9 the lungs of dogs that he had exposed --

10 A. Uh-huh.

11 Q. -- to cigarette smoke, what the industry did is
12 set up a meeting and do what they could to undercut
13 those findings; correct?

14 MR. CRIST: Objection to the form of the
15 question.

16 MR. AVRAM: Objection.

17 A. I would not have regarded it as an undercutting
18 at all. It was a sincere effort to look at it
19 objectively and --

20 Q. Dr. Auerbach's findings posed a significant
21 threat to the cigarette industry, didn't they?

22 MR. CRIST: Objection to the form of the
23 question, calls for speculation.

24 A. Dr. Auerbach's findings you say posed
25 significant threat?

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1 Q. Yes.

2 A. Significant threat? See, I'm not a medical
3 person to decide on the -- shall we say, the
4 significance of that experiment, and I would say my
5 recollection of the whole thing, that it was not
6 considered a significant experiment. That's all I
7 can say.

8 Q. Isn't it true that the tobacco industry and R.J.
9 Reynolds Tobacco Company in particular has claimed
10 that the failure to induce lung cancer in animals
11 inhaling cigarette smoke supports its view that there
12 is a controversy and that the case against cigarette
13 smoking and lung cancer is not proven? Isn't that
14 true?

15 MR. CRIST: Object to the form of the
16 question.

17 A. Well the fact -- the fact is that inhalation
18 experiments with animals have not established any
19 significant effect that I know of.

20 Q. But R.J. Reynolds has stated publicly that these
21 inhalation experiments have never produced a lung
22 cancer in an animal; correct?

23 MR. CRIST: Object to the form of the
24 question.

25 A. Well I -- I'm not aware of that statement.

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1 Q. Well let's look at Exhibit 1051. Exhibit 1051
2 is an advertisement published by R.J. Reynolds
3 entitled, quote, "Smoking and lung cancer: A second
4 opinion"; correct?

5 MR. CRIST: Object to the form of the
6 question.

7 A. See, what is that date?

8 Q. I don't know what the precise date of this
9 document is.

10 A. '97? No.

11 Q. That's just the date it was marked, sir.

12 MR. CRIST: Can you tell us where this was
13 published, state it in your question?

14 MR. O'FALLON: I'm not exactly certain.

15 A. I don't believe I was an employee at this time
16 that this was published.

17 Q. Well whether you were an employee or not, you're
18 capable of reading it; correct?

19 Up at the top it states, quote, "It has been
20 stated so often that smoking causes cancer, it's no
21 wonder that most people believe this is an
22 established fact.

23 "But, in fact," this "is nothing of the kind."
24 That's what they state in the first two paragraphs;
25 correct?

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1 MR. CRIST: Object to the form of the
2 question.

3 A. This must have been published long after I left
4 the company.

5 Q. But during the time period that you were still
6 consulting with Womble Carlyle and the industry;
7 correct?

8 MR. CRIST: Object to the form of the
9 question.

10 Can I ask for clarification of that question
11 too? When is it that this was published?

12 MR. O'FALLON: We're still in the process
13 of foundation discovery.

14 MR. CRIST: You --

15 MR. O'FALLON: This is one of the
16 documents.

17 MR. CRIST: You implied in your question
18 that it was published during his -- the period of his
19 consultancy, so therefore I assume you know when it
20 was published.

21 MR. O'FALLON: Well I assume it's in
22 the '80s, but the fact of the matter is since this
23 gentleman's either been working directly for the
24 industry or consulting with the industry since 1951
25 and I assume that this is sometime after 1951,

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1 anytime during that time period would be covered now,
2 wouldn't it?

3 MR. CRIST: I believe that he told you he
4 spent five years in Indonesia in the 1980s.

5 MR. O'FALLON: Consulting with a tobacco
6 company.

7 MR. CRIST: In the 1980s.

8 MR. AVRAM: On issues having nothing to do
9 with anything that we're discussing here.

10 BY MR. O'FALLON:

11 Q. Well the foundation for this particular document
12 will be set at other points. My point here is: Is
13 RJR stating that the connection between lung cancer
14 and smoking not proven?

15 MR. CRIST: Object to the form of the
16 question and object as lack of foundation.

17 Q. And assuming this is published, that that's what
18 they're telling the public?

19 MR. CRIST: Objection to the form of the
20 question.

21 A. Okay. As far as, say, causation is concerned,
22 there's an -- cause and effect has not been
23 established is the way I would look at it, and I'd
24 just like to leave it at that.

25 Q. R.J. Reynolds states in this particular document

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1 that, quote, "Because statistics can only point the
2 way toward further study, many researchers have
3 turned to experiments using laboratory animals.

4 "But despite elaborate and costly research, not
5 one of these smoke-inhalation experiments has ever
6 produced the lung cancer it was looking for." That's
7 what R.J. Reynolds is stating; correct?

8 MR. CRIST: Objection to the form of the
9 question.

10 A. Well I just repeat that causation has not been
11 definitely established, and -- and if you rely --
12 rely on statistics, it does not establish a causation
13 effect.

14 Q. RJR knew about the Auerbach study and the fact
15 that Auerbach claimed to have produced squamous cell
16 carcinoma in a dog in 1970 and '71; correct?

17 A. Well I'm saying again that that work was subject
18 to question.

19 Q. But RJR appears to be stating in this
20 document, --

21 A. Uh-huh.

22 Q. -- Exhibit 1051, that not -- that no experiment
23 ever has produced those.

24 MR. CRIST: Objection to the form of the --

25 Q. That's not true in light of Auerbach's work, is

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1 it?

2 MR. CRIST: Objection to the form of the
3 question.

4 A. Well, you know, I didn't -- didn't write this
5 thing and so, you know, if I were doing it, based on
6 my recollection, that that Auerbach experiment was
7 not accepted by -- by leading medical authorities.

8 Q. But that's not what this says, is it? This --
9 this exhibit, 1051, R.J. Reynolds doesn't say, "You
10 know, one gentleman believed that he found squamous
11 cell carcinoma in the lung of a dog, and we and other
12 medical experts disagree with it." Instead it says
13 point blank no experiment ever showed lung cancer;
14 right?

15 MR. CRIST: Objection to the form of the
16 question.

17 MR. AVRAM: Also, Mr. O'Fallon, you did not
18 indicate when this was published. Was this published
19 before or after the --

20 MR. O'FALLON: Sir, we'll establish
21 foundation for this at some given time.

22 MR. AVRAM: Well how can he answer a
23 hypothetical question if he doesn't know what the
24 facts are?

25 MR. O'FALLON: Well presumably anybody can

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1 answer a hypothetical question. I'm asking him
2 whether the statements in this document are accurate
3 or not.

4 MR. AVRAM: At which point in time?

5 A. Okay. Let's look at the --

6 MR. O'FALLON: After 1971.

7 A. What -- where is that?

8 Q. It's -- look under "Laboratory Experiments," the
9 middle column, --

10 A. Okay, yeah.

11 Q. -- first two paragraphs.

12 A. Well I feel this way about this statement, that
13 whoever wrote this looked at all the facts, and based
14 on what they knew, they regard these -- this
15 statement as being correct.

16 Q. But based on what you know as you sit here
17 today, that statement is not correct?

18 MR. CRIST: Object to the form of the
19 question.

20 MR. AVRAM: Objection.

21 Q. Based on your knowledge of the findings of
22 Auerbach, that is not a correct statement, is it?

23 MR. CRIST: Object to the form of the
24 question. If you want to question him about the
25 findings of Auerbach, I suggest you put them in front

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1 of him.

2 MR. O'FALLON: I suggest you let me conduct
3 my deposition. You can state the word "objection."
4 I don't need you coaching the witness. Okay?

5 MR. CRIST: I'm not.

6 A. Well this is the first time I'm seeing these
7 particular statements. I'm not even sure that this
8 ever appeared in the newspaper. I'm not sure.

9 Q. Regardless of whether it appeared or not, are
10 those two paragraphs true or false --

11 MR. CRIST: Objection.

12 Q. -- under "What About Laboratory" Animals?

13 MR. CRIST: Objection.

14 Q. Based on what you knew and RJR --

15 A. Okay. Look at that last statement there, "ever
16 produced the lung cancer it was looking for," so I
17 don't know what they were looking for.

18 Q. You don't know what Auerbach was looking for?

19 MR. CRIST: Objection to the form of the
20 question.

21 A. Well in terms of a specific result, I don't
22 know.

23 Q. He was looking for lung cancer, right, lung
24 cancer similar to human lung cancer? Isn't that what
25 Auerbach was looking for?

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1 MR. CRIST: Objection to the form of the
2 question, calls for speculation.

3 MR. AVRAM: Objection.

4 A. Well I -- I guess if anybody asks me, I would
5 not have written it that way.

6 THE REPORTER: Off the record, please.

7 (Recess taken.)

8 (Plaintiffs' Exhibit 1080 was marked
9 for identification.)

10 BY MR. O'FALLON:

11 Q. Dr. Senkus, I've had marked as Exhibit 1080 a
12 memo dated November 4th of 1970, Bates stamp numbered
13 0 -- 50199 0368 through 0369.

14 Do you recognize this document?

15 A. Yes.

16 Q. Is this a document you wrote?

17 A. Yes.

18 Q. And you wrote this document in your ordinary
19 course of business; correct?

20 A. Yes.

21 Q. And you maintained it in the ordinary course of
22 business; correct?

23 A. Yes.

24 Q. This is a document concerning a meeting with
25 numerous individuals concerning the results of

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1 experiments with smoking dogs conducted by Dr. Oscar
2 Auerbach; correct?
3 A. Yes.
4 Q. This particular meeting took place at the office
5 of the Council for Tobacco Research; correct?
6 A. Yes.
7 Q. There were numerous participants from the
8 Tobacco Working Group; correct?
9 A. Not the Tobacco Working Group.
10 Q. Well what's "TWG" stand for?
11 A. Where do you see that?
12 Q. Under "Present." Doesn't it say "TWG
13 Participants"?
14 A. Oh, okay, yes. That's preliminary. He was
15 going to make a presentation to the Tobacco Working
16 Group.
17 Q. Okay. Who was, Auerbach?
18 A. Yeah.
19 Q. So you're having a meeting before his
20 presentation; correct?
21 A. "A discussion was held preliminarily ...
22 presentation ... made ... Auerbach ... Working ... at
23 the National Cancer" -- okay.
24 Q. Okay. And the only actual members of the
25 Tobacco Working Group that participated in your

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1 meeting here were yourself, Dr. Wakeham from Philip
2 Morris, Dr. Spears from Lorillard and Dr. Kensler;
3 correct?

4 A. Right.

5 Q. The other people who were present were not
6 members of the Tobacco Working Group; correct?

7 A. Fagan, Holtzman, Hall. Right.

8 Q. And presumably they weren't going to be among
9 the people who Dr. Auerbach was going to be
10 presenting the paper to; correct?

11 A. Yes.

12 Q. So you're all basically having a meeting before
13 the meeting to decide how you're going to deal with
14 Dr. Auerbach's paper; correct?

15 MR. CRIST: Objection to the form of the
16 question.

17 THE WITNESS: I keep losing this thing.

18 THE REPORTER: Off the record, please.

19 (Discussion off the record.)

20 MR. CRIST: The witness's last comment was
21 in reference to the fact that his microphone had
22 fallen off again.

23 BY MR. O'FALLON:

24 Q. Dr. Senkus, you and the other tobacco
25 manufacturer members of the Tobacco Working Group

1 were having a meeting before the meeting to decide
2 how you were going to deal with Dr. Auerbach's paper
3 that was going to be presented to you; correct?

4 MR. SCHEINER: Object to the form.

5 A. Okay. Repeat the question, please.

6 Q. You and the other tobacco manufacturer members
7 of the Tobacco Working Group were having a meeting
8 before the meeting to decide how you were going to
9 deal with Dr. Auerbach's paper that was going to be
10 presented to you, the Tobacco Working Group;
11 correct?

12 MR. SCHEINER: Object to the form.

13 A. To decide how to deal with the presentation,
14 you're asking?

15 Q. Yes.

16 A. Uh-huh. We were there to learn about his
17 experiment.

18 Q. Well the fact of the matter is that what's
19 discussed in this memo is all the various ways you
20 can poke holes in his study; correct?

21 MR. CRIST: Objection to the form of the
22 question.

23 A. That was not my impression. I went there simply
24 to hear what he did, and I have reported the meeting
25 to management as in that memorandum.

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1 Q. But this memorandum, Deposition Exhibit --
2 what's the deposition -- 1080?

3 A. Uh-huh.

4 MR. CRIST: 1080.

5 Q. Deposition Exhibit 1080, this isn't a report of
6 Auerbach's presentation to NCI? This is a report of
7 the meeting that CTR -- that you all had at CTR
8 before he made any presentation; correct?

9 A. Yes.

10 Q. Okay. And at this meeting are three attorneys;
11 correct?

12 MR. SCHEINER: Object to the form.

13 A. Yes.

14 Q. You've got Mr. Holtzman from Philip Morris's
15 legal department; you have Mr. Hall from Philip
16 Morris's legal department; and you have outside
17 counsel, Shook, Hardy & Bacon. Correct?

18 MR. CRIST: Objection to the form of the
19 question.

20 A. Yes.

21 Q. Is this typical, that you, a scientist, meet
22 with your lawyers before going into Tobacco Working
23 Group meetings?

24 MR. CRIST: Objection to the form of the
25 question, lack of foundation.

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1 A. It's not typical.

2 Q. And the attorneys here, especially Shook,
3 Hardy & Bacon, these are the people that have been
4 defending the industry in cigarette litigation for
5 years at this point; correct?

6 MR. CRIST: Objection to the form of the
7 question.

8 A. They have been defending.

9 Q. Yeah. As a matter of fact, Shook, Hardy &
10 Bacon, that law firm was there at the founding of
11 CTR; correct?

12 MR. SCHEINER: Object to the form.

13 A. At the founding of CTR?

14 Q. Yes.

15 A. They may have been. I don't know.

16 Q. On the second page, we go through what's
17 basically some of your discussion of Dr. Auerbach's
18 work. The first point is that you're criticizing the
19 beagle as a poor choice for the experiment for
20 inhalation testing; correct?

21 MR. CRIST: Objection to the form of the
22 question.

23 A. Where -- where does it say that?

24 Q. At the very top.

25 A. I'm just reporting what I heard at the meeting,

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1 yeah.

2 Q. Right. Did you agree with that, that the beagle
3 was a poor choice?

4 A. I have no opinion on it.

5 Q. The beagle's a standard experimental animal,
6 isn't it?

7 MR. CRIST: Objection to the form of the
8 question?

9 A. I -- insofar as I know, I'm not -- I can't say
10 one way or another.

11 Q. And specifically the breed beagle has been used
12 in experiments because it has very defined genetic
13 characteristics; correct?

14 MR. CRIST: Objection to the form of the
15 question.

16 A. I don't know.

17 Q. Well at one point in time you were actually in
18 charge of a biological research laboratory that
19 included animals, so you must have some knowledge of
20 experimental animals; correct?

21 MR. CRIST: Object.

22 A. Where -- when was I in charge?

23 Q. '67 to '70.

24 A. Well I -- no, I was not in charge.

25 Q. You were the director of research.

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1 A. No, the immediate person in charge was somebody
2 else.

3 Q. But you were ultimately responsible; correct?

4 A. I relied on his decision, but it was not my
5 responsibility. I mean, I didn't have intimate
6 knowledge about animals to be used in animal
7 experiments.

8 Q. Okay. So at least you couldn't make the
9 criticism of Dr. Auerbach's study that the beagle was
10 a poor choice of animal; correct?

11 A. Now it doesn't say -- explicitly say this, but
12 I'm simply re -- re -- reporting the tone of the
13 meeting.

14 Q. And the tone of the meeting was that these
15 people were basically trying to figure out any way
16 they could to undercut Dr. Auerbach's study;
17 correct?

18 MR. CRIST: Objection to the form of the
19 question.

20 A. I didn't regard it that way, not at all.

21 Q. Well the first thing they do is they criticize
22 the animal he chose; correct?

23 MR. CRIST: Objection, asked and answered.

24 A. They're not criticizing. They're commenting.
25 They're expressing their opinion. Maybe that's not

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1 the way they would have done it, would not have
2 chosen that particular animal.

3 Q. What animal would be more appropriate?

4 A. I don't know. I -- I -- I don't know what they
5 would have thought.

6 Q. Did you know whether these people who made these
7 criticisms ever went out and did an inhalation study
8 with whatever animal they now thought was more
9 appropriate?

10 MR. CRIST: Objection to the form of the
11 question.

12 A. No.

13 Q. Did R.J. Reynolds ever go and do some follow-up
14 inhalation studies trying to match Auerbach's
15 findings?

16 A. Well, I'm only reporting on this meeting, and
17 the question was did -- did Reynolds --

18 Q. Did R.J. Reynolds ever do any follow-up
19 inhalation studies based on Auerbach's findings
20 during the time you were there?

21 MR. CRIST: Object to the form of the
22 question.

23 A. On -- did they do a follow-up?

24 Q. Yeah.

25 A. Well we were not set up to do it, so we did not

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1 have a follow-up.

2 Q. You could have been set up to do it; right?

3 A. It takes a little doing.

4 MR. CRIST: Objection.

5 A. It's not easy to set up a animal facility and

6 start testing, so it takes a lot of period, long

7 period of getting established in -- in this work.

8 Q. It just takes some time and money; right?

9 A. Takes a long time. I don't think the money's a
10 problem.

11 Q. During the time that you were either assistant

12 director of research or director of research from

13 1960 to 1975, what was the average yearly expenditure

14 by RJR on research for tobacco?

15 A. Well let's see. Research on tobacco. Let's

16 see. Please understand I'm just guessing wildly.

17 Maybe \$5 million.

18 Q. During that same time period, what was their

19 average annual expenditure on advertising?

20 MR. CRIST: Objection.

21 A. I have no idea.

22 Q. Do you know whether it exceeded \$5 million?

23 MR. CRIST: Objection.

24 A. It's conceivable it may have, yes.

25 Q. Do you know what RJR's annual average profit

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1 during those years was from the sale of cigarettes?

2 A. No, I don't know what the profit was.

3 Q. It was a huge number, wasn't it?

4 A. Huh?

5 Q. It was a huge number, though, wasn't it?

6 A. It was.

7 Q. In the billions of dollars?

8 A. I don't know about that, talking about

9 billions.

10 Q. Hundreds of millions?

11 Hundreds of millions?

12 A. Yeah, hundreds of millions.

13 Q. Under examination of the cancerous tissues, it

14 does state that Auerbach believes that his slides

15 show cancerous tissue; correct?

16 MR. CRIST: Objection to the form of the

17 question.

18 A. You're talking about section three?

19 Q. Yes.

20 A. Uh-huh. Okay. So what's the question?

21 Q. Auerbach thought he -- what he had produced in

22 these dogs by giving them cigarette smoke into their

23 lungs through inhalation tests was cancer; correct?

24 MR. CRIST: Objection to the form of the

25 question.

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1 A. That's what he says.

2 Q. In medical terms, these are referred to as
3 squamous cell carcinoma; correct?

4 A. That's what it says.

5 MR. CRIST: Objection to form.

6 Q. That's also a human lung cancer; correct?

7 A. I am not sure about that.

8 Q. You don't know whether or not humans get
9 squamous cell lung carcinoma?

10 A. I'm not familiar with that terminology.

11 Q. You state that one of the slides suggests a
12 carcinoma; correct?

13 MR. CRIST: Objection to the form of the
14 question, and for purposes of completeness, I would
15 ask that the entire paragraph be read.

16 A. This is what I heard and reporting it at that
17 meeting.

18 Q. Okay. So you didn't look at the slides
19 yourself?

20 A. No, I did not.

21 Q. But it looks like the other people there
22 appeared that one slide suggested a carcinoma;
23 correct?

24 MR. CRIST: Objection.

25 A. Let's see, I'm trying to read here. Where did

1 I --

2 MR. AVRAM: Take your time reading it.

3 A. What -- where are we?

4 Q. How about the second paragraph under number
5 three.

6 A. Okay, second -- second paragraph. Okay, yeah, I
7 see what it reads.

8 Q. Okay. So apparently there was a -- a feeling
9 that one of the slides did suggest a carcinoma;
10 correct?

11 A. "Suggests a carcinoma," that's what it reads.

12 MR. CRIST: Objection.

13 Q. And that's a determination made by basically
14 industry people, correct, people from the tobacco
15 industry?

16 MR. CRIST: Objection to the form of the
17 question, calls for speculation.

18 A. That third paragraph, Dr. Sommers, who's not an
19 employee of Reynolds Tobacco, made an assumption
20 according to this.

21 Q. Dr. Sommers was on the CTR staff; right?

22 A. Yes.

23 Q. And CTR is a -- is the Council for Tobacco
24 Research; correct?

25 A. Yes.

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1 Q. It's funded by the tobacco industry; correct?

2 A. Yes.

3 Q. Everybody at this meeting was either employed by
4 the tobacco industry or by CTR, which is funded by
5 the tobacco industry; correct?

6 A. Yes.

7 Q. So this couldn't be considered a disinterested
8 group of individuals; correct?

9 MR. SCHEINER: Objection.

10 MR. CRIST: Objection.

11 A. I'm not in a position to say. I feel this was a
12 conscientious effort to understand and -- what
13 Dr. Auerbach had done.

14 Q. Did CTR do follow-up inhalation studies on
15 beagle dogs?

16 A. Who?

17 Q. CTR.

18 A. CTR?

19 MR. SCHEINER: Object to the form.

20 A. I don't recall.

21 Q. And again you would agree that all the dogs that
22 Auerbach tested did have cigarette smoke -- did have
23 their lungs exposed to cigarette smoke; correct?

24 MR. CRIST: Objection to the form of the
25 question, no foundation.

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1 Q. You were familiar with Dr. Auerbach's work;
2 correct?

3 A. I -- not intimately.

4 Q. Well you were as a member of the Tobacco Working
5 Group; correct?

6 A. Yes, I was familiar with it, but not
7 intimately.

8 Q. But you knew generally what was being done;
9 correct?

10 A. Generally.

11 Q. And you knew that what he was doing was exposing
12 the lungs of beagle dogs to cigarette smoke;
13 correct?

14 MR. CRIST: Objection to the form of the
15 question, lack of foundation.

16 A. In --

17 Q. Dr. Auerbach was exposing the lungs of beagle
18 dogs to cigarette smoke; right?

19 MR. CRIST: Same objections.

20 A. Yeah, he was exposing lungs to cigarette smoke.

21 Q. Right. These were called inhalation tests.
22 That's because the animals actually inhale cigarette
23 smoke just like a human being does; correct?

24 MR. CRIST: Objection.

25 A. Not like a human being.

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1 Q. Well in any event, both a human being and the
2 dogs eventually get cigarette smoke in their lung;
3 correct?

4 MR. CRIST: Objection.

5 A. Well the way he conducted, as I recall -- this
6 is a long time ago. The way the experiment was
7 conducted in no way compares with human smoking, in
8 no way.

9 Q. The end result was the cigarette smoke was --
10 still ended up in the dogs' lungs; correct?

11 A. Well I'm not familiar with the exact what he
12 found. I'm not --

13 Q. You were on the Tobacco Working Group.

14 A. Yeah, but --

15 MR. CRIST: Excuse me, I think you're not
16 allowing him to finish this answer, Dan. We're
17 overriding each other a little bit.

18 A. I'm not totally familiar with the -- all the
19 details of that experiment, but as near as I
20 remember, the manner in which he conducted the
21 experiments in no way approached human smoking.

22 Q. Is that because the smoke went through a trachea
23 pipe?

24 A. I think I answered the question. In no way
25 approached human smoking.

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1 Q. Why?

2 A. I mean, if you compare the exact situation, the
3 way he did it, the way a human smokes, I'm -- I'm
4 saying in no way approached human smoking.

5 Q. And so that's another -- another criteria that
6 RJR is going to demand, that if we're going to do
7 laboratory experiments, they have to duplicate
8 precisely and exactly the way a cigarette smokes a
9 cigarette -- smokes a cigarette?

10 MR. CRIST: Objection to the form of the
11 question.

12 A. You're asking me, you know, how I felt about
13 this, and I was in no position to advise Reynolds
14 whether or not to conduct these experiments -- this
15 experiment or to repeat it. I was not in a position
16 to, to recommend --

17 Q. You are --

18 You are Reynolds' representative on the Tobacco
19 Working Group; correct?

20 A. Yes.

21 Q. No one at Reynolds knew more about the Auerbach
22 study than you did; correct?

23 MR. CRIST: Object to the form of the
24 question, calls for speculation.

25 A. Well I don't know whether there was anybody that

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1 knew more or less.

2 Q. You're the head of the research department at
3 this point in time. If someone knew more about it,
4 wouldn't you send them to the Tobacco Working Group
5 as opposed to yourself? You're the person who's
6 going to make that decision; right?

7 MR. CRIST: Objection to the -- objection
8 to the form of the question. In addition, that has
9 been asked and answered.

10 A. I -- I have a problem here in fully
11 understanding your question, as to you're asking me
12 what my responsibilities were.

13 MR. AVRAM: Could you -- could you repeat
14 the question, please, Dan.

15 Q. My point is, sir, is that you were the head of
16 research in 1970 at the time this memo was written;
17 correct?

18 A. Yes.

19 Q. You're the head of research for RJR; correct?

20 A. Yes.

21 Q. You're also RJR's representative on the Tobacco
22 Working Group; correct?

23 A. Yes.

24 Q. Presumably you should know as much about the
25 studies that are going to be presented to you,

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1 including the study of Dr. Auerbach, than anybody
2 else that works for you; correct?

3 MR. CRIST: Objection, calls for
4 speculation.

5 A. I have a hard time following your sequence of --

6 Q. Well --

7 A. -- reasoning here.

8 Q. -- Doctor, if you didn't think you knew enough
9 about the Auerbach study to make an intelligent
10 contribution to the Tobacco Working Group, you could
11 certainly go out and find somebody in your department
12 who knew enough about it and have them educate you
13 about it; correct?

14 MR. CRIST: Objection, calls for
15 speculation.

16 A. Well I think when you say as a member of the
17 Tobacco Working Group, that certainly was not my
18 responsibility. I know what my responsibility was in
19 the Tobacco Working Group, and it was certainly not
20 this.

21 Q. So it wasn't your responsibility to criticize
22 other people's work?

23 A. I'm not criticizing.

24 Q. You think Auerbach's work was fine?

25 A. Beg your pardon?

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1 Q. Did you think Auerbach's work was valid?

2 MR. CRIST: Ob --

3 A. Well, put it this way, that he was a very
4 reputable scientist, and valid or not, I'm really not
5 in a position to say.

6 Q. Did you tell your superiors at R.J. Reynolds
7 that a scientist who was reputable had now produced a
8 humanlike lung cancer in the lung of a dog on
9 inhalation testing?

10 MR. CRIST: Objection, lack of foundation.

11 A. See, you're tying Tobacco Working Group and
12 director of research, and -- and I think these are
13 separate activities so that there is no direct
14 connection there.

15 Q. The document we're referring to, document 1080,
16 is a direct report from you to the vice president;
17 correct?

18 MR. CRIST: Excuse me. Vice president of
19 R&D?

20 A. Yeah, Vassallo, uh-huh.

21 Q. Correct?

22 A. Yeah.

23 Q. Vice president of R&D. Did you tell
24 Mr. Vassallo or did you tell Mr. Galloway that they
25 should be concerned and that this was important

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1 because a reputable scientist has induced what he
2 believes to be squamous cell carcinoma in the lung of
3 an -- of an animal exposed to cigarette smoke?

4 MR. CRIST: Object to the form of the
5 question.

6 A. Let me think about that, how to answer that, I
7 mean, from standpoint of that particular situation.
8 I come into this meeting. I reported what was done
9 at the meeting, reported what was discussed, what the
10 opinions were, and certainly at that time I did not
11 consider Auerbach's experiment as being of prominent
12 importance to report. And that's -- that's all I
13 have to say.

14 Q. You didn't feel it was important?

15 MR. CRIST: Objection, asked and answered.

16 A. Based on my interpretation of what was here, I
17 did not consider it important to report further other
18 than to Vassallo.

19 Q. Do you think its findings that RJR as a company
20 that stated publicly in 1954 that they put the health
21 of the smoker paramount to every other business
22 concern, do you think it's something RJR should have
23 told the public about?

24 MR. CRIST: Objection to the form of the
25 question for lack of foundation. It's also

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1 argumentative.

2 A. Well honestly as I look back on this, this was
3 one experiment that was conducted, and even the
4 American Medical Association Journal did not see fit
5 to publish the results, so what was there to report?

6 Q. Were these results ever published?

7 A. Well it says here that it was rejected. Now
8 whether or not they were published, I don't recall.

9 Q. As a member of R.J. Reynolds' research
10 department, do you consider Auerbach's findings
11 significant?

12 MR. CRIST: Objection, asked and answered.

13 A. Are you talking about, well, this particular --
14 are you talking about this particular result?

15 Q. The finding of squamous cell carcinoma in the
16 lung of a dog following inhalation experiments.

17 MR. CRIST: Same objection.

18 A. At that time, after the meeting, I felt -- and
19 the people that got copies of this report, these
20 people here, Stokes and Smith, one is president of
21 Reynolds Tobacco, the other one is vice -- chief
22 executive officer, they got this report, and I don't
23 think any follow-up was necessary.

24 Q. And none of those individuals followed up with
25 you and asked you whether you felt this was

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1 significant?

2 MR. CRIST: Objection to the form.

3 Q. Did the president of RJR call you up and say,

4 "Dr. Senkus, I'm -- I'm shocked; there has been a

5 squamous cell carcinoma produced in the lung of a dog

6 following exposure to cigarette smoke"?

7 A. Well the way that report reads, there would be

8 no reason for him to be concerned.

9 Q. Because you along with the tobacco industry's

10 lawyers have set up a strategy for trying to undercut

11 Dr. Auerbach's findings; correct?

12 MR. CRIST: Objection to the form --

13 MR. AVRAM: Objection.

14 MR. CRIST: -- of the question.

15 A. Well I didn't regard it that way, definitely

16 not.

17 Q. Is it typical that you meet with lawyers who are

18 defending the industry from litigation to discuss all

19 of the scientific studies you were doing as part of

20 the Tobacco Working Group?

21 MR. CRIST: Objection to the form of the

22 question.

23 A. Well that -- that was -- whatever we did there

24 was -- was reported and in detail, Tobacco Working

25 Group.

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1 Q. Did you go in and tell your -- the other members
2 of the Tobacco Working Group who weren't associated
3 with the industry that you routinely met with your
4 lawyers before coming to the Tobacco Working Group
5 meetings?

6 A. Did I tell people?

7 Q. Sure. Did you tell all the other people? There
8 were nonaffiliated people on the Tobacco Working
9 Group too, weren't there?

10 A. You mean outside of the tobacco --

11 Q. Right.

12 A. Yeah. There were people from National Cancer
13 Institute and -- and other hospitals and whatnot.

14 Q. Did you tell the folks from the National Cancer
15 Institute that you usually discussed with your
16 lawyers what you were going to do at the Tobacco
17 Working Group meetings before coming there?

18 MR. CRIST: Objection to the form of the
19 question, assumes facts not in evidence.

20 MR. AVRAM: Also no foundation.

21 A. You -- you must understand what my function in
22 the Tobacco Group -- Working Group was, and so it
23 would not have entailed anything like that.

24 Q. Is that a "yes" or a "no"?

25 A. That's -- that -- I mean, it -- it would -- I

1 would not be expected to do that.

2 Q. To tell the other members that you're talking
3 with your lawyers before coming into the meeting?

4 A. Oh --

5 MR. CRIST: Objection to the form of the
6 question.

7 A. -- the -- well I don't -- I don't understand
8 your question.

9 Q. In addition to your meeting about Auerbach's
10 squamous cell carcinoma study, you also as part of
11 the Tobacco Working Group made an attempt to make
12 sure that Auerbach didn't receive additional funding
13 for further studies on smoking dogs; correct?

14 MR. CRIST: Object to the form of the
15 question.

16 A. Okay. Now I -- I'd like to understand your
17 question.

18 Q. Do you want me to restate it?

19 A. Yes, please.

20 Q. Okay. Auerbach wanted further funding from
21 NCI --

22 A. Uh-huh.

23 Q. -- to do studies on nicotine using smoking dogs;
24 correct?

25 A. Yeah, okay.

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1 Q. And you and the other members of the tobacco
2 manufacturers, you got together and concocted a
3 strategy to make sure he wouldn't get that funding;
4 correct?

5 MR. AVRAM: Objection.

6 A. Any --

7 MR. CRIST: Object to the form of the
8 question.

9 A. Any decision to fund somebody by NCI was an NCI
10 decision.

11 Q. Which you would try to influence; correct?

12 A. Definitely not, absolutely not.

13 (Plaintiffs' Exhibit 1081 was marked
14 for identification.)

15 BY MR. O'FALLON:

16 Q. I've marked as Exhibit 1081 a two-page document
17 dated December 22nd, 1971, Bates stamp numbered 50199
18 0318 through 0319, from Murray Senkus to Mr. E. A.
19 Vassallo.

20 Do you recognize that document?

21 A. Yeah, it's my document.

22 Q. This is a document you wrote in the ordinary
23 course of business at Reynolds; correct?

24 A. Yes, uh-huh.

25 Q. And you maintained it in the ordinary course of

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1 business?

2 A. Yes.

3 Q. Okay. The purpose of this meeting that was held

4 at the Council for Tobacco Research -- Research was

5 to discuss further Auerbach's smoking experiments on

6 dogs under the sponsorship of the National Cancer

7 Institute; correct?

8 A. Uh-huh.

9 Q. And at this meeting were three people from The

10 Council for Tobacco Research; correct?

11 A. Yes, uh-huh.

12 Q. Lisanti, Hoyt and Hockett; right?

13 A. Yes.

14 Q. Three people from Philip Morris; correct?

15 A. Yes.

16 Q. Holtzman, Saleeby and Wakeham; correct?

17 A. Uh-huh.

18 Q. Two people from R.J. Reynolds?

19 A. Yes.

20 Q. Yourself and a Mr. Roemer; correct?

21 A. Uh-huh, yes.

22 Q. Okay. It states that "The National Cancer

23 Institute, under the direction of Gio B. Gori, is

24 negotiating with Auerbach to conduct further smoking

25 experiments on dogs"; correct?

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1 A. Yes.

2 Q. It says "As defined by NCI, the objective is to
3 determine the effect of nicotine on smoking dogs";
4 correct?

5 A. Yes.

6 Q. "... one set of cigarettes will be smoked on a
7 group of dogs which will produce 2 milligrams of
8 nicotine per cigarette; the other set of dogs will
9 be" -- "set of dogs will be smoked, using low
10 nicotine tobacco, something on the order of .2
11 milligrams of nicotine per cigarette"; correct?
12 Yes?

13 MR. CRIST: You're asking that's what it
14 says?

15 A. That's what it says.

16 Q. Right. And you were at the meeting; right?
17 You were at this meeting; right?

18 A. Yes.

19 Q. You then state that "The Scientific Advisory
20 Board (SAB) of the CTR, at its meeting on December
21 10th through 12th, 1971, concluded that the
22 experiment would be meaningless from a medical
23 standpoint, and" that "we should make every effort to
24 convince NCI to abandon the experiment"; correct?

25 A. That's what it says.

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1 Q. So you are trying to influence the research that
2 NCI funds; correct?

3 MR. CRIST: Objection to the form of the
4 question.

5 A. It is to be remembered that the decision whether
6 or not to pursue was NCI -- would be an NCI decision.

7 Q. But the members of the tobacco manufacturers are
8 going to attempt to influence that decision, aren't
9 they?

10 MR. CRIST: Objection to the form of the
11 question.

12 A. Present facts.

13 Q. And influence the decision; correct?

14 MR. CRIST: Objection.

15 A. Present facts.

16 Q. Present what you believe were facts?

17 MR. CRIST: Objection to the form of the
18 question.

19 Q. Specifically what you're going to go do is go
20 try to convince Dr. Gori himself that this isn't a
21 good idea; correct?

22 A. Let him decide this on the facts. That would be
23 his decision.

24 Q. Well that's not what you wrote. You said "It
25 was" --

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1 MR. CRIST: Objection.

2 Q. Quote, "It was concluded that discussion of the
3 pertinent scientific data with Dr. Gori will convince
4 him that the Auerbach experiments should be
5 abandoned," so you're going to go talk with him;
6 right?

7 THE WITNESS: I'm off --

8 THE REPORTER: Off the record.

9 THE WITNESS: -- the track again.

10 (Discussion off the record.)

11 MR. CRIST: Okay. Once again, the
12 witness's last comment was due to the fact that his
13 microphone once again fell off.

14 BY MR. O'FALLON:

15 Q. Dr. Senkus, to go back, what you wrote in this
16 memo, Exhibit 1081, on the second page you wrote,
17 quote, "It was concluded that discussion of the
18 pertinent scientific data with Dr. Gori will convince
19 him that the Auerbach experiments should be
20 abandoned"; correct?

21 A. Yes, that's what it says.

22 Q. Now you were going to have a meeting with
23 Dr. Gori and just the research directors; correct?

24 A. Okay.

25 Q. That's what you state; right?

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1 A. That -- I read that. I see what it --

2 Q. Right.

3 A. -- says.

4 Q. You state and you tell the vice president of R&D
5 that Dr. Gori has agreed to meet with the research
6 directors, which would be you and the other research
7 directors from the other manufacturers; correct?

8 A. Yes, that's what it says.

9 Q. Presumably he's going to meet with you alone;
10 correct?

11 A. That's what it says.

12 Q. Is that typical, that the tobacco industry would
13 have ex parte meetings with Dr. Gori, the head of the
14 NCI project?

15 MR. CRIST: Objection to the form of the
16 question.

17 A. Would have what kind of meetings?

18 Q. Ex parte.

19 MR. CRIST: I think that's a lawyer talk.
20 He probably doesn't understand it.

21 Q. It means without the other people present, the
22 other side present.

23 A. I don't know.

24 Q. How many --

25 How many meetings did you and the other research

1 directors have with Dr. Gori where none of the other
2 members of the Tobacco Working Group were present?

3 A. I don't recall of any.

4 Q. Other than the one that's stated in this memo?

5 MR. CRIST: Objection to the form of the
6 question, no foundation.

7 A. Well judging from this, I don't know whether
8 this meeting occurred or not.

9 Q. You would have been there, not me. Did it take
10 place?

11 A. I don't recall.

12 Q. Do you know whether or not the NCI ever funded
13 these nicotine studies on the smoking dogs?

14 A. Well we did 162 studies, and I can't
15 specifically recall yes or no.

16 Q. So you can't tell me as you sit here today
17 whether you were successful in convincing Dr. Gori
18 not to give Dr. Auerbach his funding?

19 A. I really cannot.

20 MR. CRIST: Objection. Objection to the
21 form of the question. I also object on the basis
22 it's inconsistent with the witness's prior
23 testimony.

24 MR. O'FALLON: You know, stop coaching.
25 Just state "objection." That's enough.

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1 MR. CRIST: You know, you are not
2 entitled -- you are not entitled, Dan, to misstate
3 the witness's prior testimony. He just told you he
4 did not know if this meeting took place. You're not
5 entitled to go back and to suggest to him something
6 else.

7 MR. O'FALLON: You ought to start listening
8 to my questions, sir.

9 MR. CRIST: I did listen to your question.

10 MR. O'FALLON: Well I'm going to restate
11 it. Maybe you ought to listen to it just a little
12 more carefully.

13 MR. CRIST: State it more carefully.

14 BY MR. O'FALLON:

15 Q. As you sit here today, you can't tell me whether
16 or not the research directors were successful in
17 convincing Dr. Gori not to fund Auerbach's study on
18 nicotine; correct?

19 MR. CRIST: Objection to the form of the
20 question.

21 A. You have a bunch of negatives there. As I sit
22 here -- I'd like to hear that again slowly.

23 Q. As you sit here today, you can't tell me whether
24 or not the tobacco company research directors were
25 successful in convincing Dr. Gori not to fund

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1 Auerbach's study on nicotine?

2 MR. SCHEINER: Objection.

3 MR. CRIST: Same objections.

4 A. Hmm, hmm. As I sit here, can I tell you whether
5 or not research directors convinced Dr. Gori whether
6 to conduct or not conduct, is that what you're
7 saying?

8 Q. Yes.

9 A. Okay. I can't recall really. I don't recall
10 any follow-up on this. I don't recall any follow-up
11 on this.

12 Q. You don't recall being at a meeting with
13 Dr. Gori concerning this subject?

14 MR. CRIST: Objection, asked and answered.

15 A. I -- no, I do not recall being with Dr. Gori.

16 MR. AVRAM: How are you -- how are you on
17 time?

18 Q. But that doesn't mean the meeting didn't occur,
19 does it?

20 A. I don't know.

21 Q. Okay.

22 MR. SCHEINER: Objection.

23 MR. O'FALLON: Why don't we go off the
24 record and take our lunch break.

25 THE REPORTER: Off the record, please.

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1 (Luncheon recess taken at 11:42 o'clock
2 a.m.)
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1 AFTERNOON SESSION

2 (Deposition reconvened at 1:09 o'clock
3 p.m.)

4 BY MR. O'FALLON:

5 Q. Dr. Senkus, in approximately 1967 R.J. Reynolds
6 instituted some biological testing in-house;
7 correct?

8 A. Yes.

9 Q. And it carried that testing on for approximately
10 three years; is that right?

11 A. Yes.

12 Q. Shutting that down in 1970?

13 A. Yes.

14 Q. We've had previously marked in this litigation a
15 document Bates stamp numbered 50154 3470 through
16 3517, and it's been marked as Plaintiffs' Exhibit
17 1054.

18 Have you seen this document previously?

19 MR. CRIST: Let me just note for the record
20 that this appears that it might be two different
21 documents or perhaps pieces of the same document
22 twice.

23 MR. AVRAM: Dan, did you give the date for
24 this thing? I thought I heard a date, '82 or
25 something.

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1 MR. CRIST: On the first page it says March
2 '83.

3 MR. AVRAM: Okay, okay, that's what it is.

4 A. Yes, I've looked at it.

5 Q. Okay. Did you look at that document in
6 preparation for today's deposition?

7 MR. CRIST: Let me object --

8 A. Yes.

9 MR. CRIST: -- to this on the basis that at
10 least in some jurisdictions that's considered to be
11 work product, what he may have reviewed in the course
12 of the deposition preparation.

13 MR. AVRAM: I join in that objection.

14 MR. CRIST: Is there any understanding,
15 Dan, with respect to whether or not that is work
16 product in the context of these depositions?

17 MR. O'FALLON: I would take the position
18 it's not. I don't know whether the court's been
19 asked to rule on that or not. I would take the
20 position that factually what somebody has looked at
21 is not work product. I'm not asking about
22 conversations he had about the document. I'm not
23 asking what was done. I'm simply asking whether this
24 was a document he was shown in preparation, and that
25 fact alone I believe is not considered work product.

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1 Whether that's been litigated by this court, whether
2 that's been specifically ruled by -- ruled on by this
3 court, I do not know.

4 I think if you look at the protective order,
5 what the protective order says is that we are
6 entitled to inquire into the general subject matters
7 of conversations, and I would put this in that area
8 of general subject matter. Again I've not asked for
9 any -- to know anything about what was said by a
10 lawyer about this document.

11 MR. CRIST: Okay. Well the -- the -- a
12 point that I would make is -- is -- is if that's your
13 position, we're certainly content to abide that
14 position as well as long as we don't get whipsawed,
15 you know, in the context of other depositions.

16 And I assume that for purposes of Arch, that
17 you're not going to make any kind of a contention
18 that there's been any kind of a waiver of otherwise
19 applicable work-product protection with respect to
20 what documents the witness may have seen in the
21 course of witness preparation; is that right?

22 MR. MURRAY: I said that we'll be bound by
23 the laws of the jurisdiction of Arch.

24 MR. CRIST: Well that's not what my
25 question is.

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1 MR. O'FALLON: Well but let's --

2 MR. CRIST: My question is: You are not
3 going to claim there's a waiver?

4 MR. O'FALLON: Look, let's not -- let's not
5 sit here and -- and -- and debate this. The fact of
6 the matter is in Minnesota the fact that you've
7 stated "objection" and you've stated the basis for
8 your objection of attorney-client privilege means you
9 haven't waived that objection. So if at any point in
10 time the issue becomes whether this goes into
11 evidence, you have the opportunity at that point in
12 time to make all your arguments, and -- and you've
13 preserved your objection on that basis.

14 MR. CRIST: Okay. And you'll agree that
15 we've preserved our objection on that basis?

16 MR. MURRAY: I'll agree to that.

17 MR. CRIST: Thank you. And -- and that
18 extends also to work product?

19 MR. O'FALLON: I'm not going to say
20 anything more than I've said. We've -- you know,
21 let's -- I don't think we need a lengthy colloquy on
22 this.

23 MR. CRIST: No, I agree. I'm just trying
24 to get by it once and be done with it.

25 MR. MURRAY: I'll agree to your objection

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1 on work product.

2 MR. CRIST: Thank you.

3 MR. MURRAY: I'll agree to understand that
4 your objection stands with regard to work product.

5 MR. CRIST: And is not waived.

6 BY MR. O'FALLON:

7 Q. I'd like you to look at page 472 of this
8 document, Bates number 472 at the side there,
9 Dr. Senkus.

10 MR. CRIST: He may not understand Bates
11 numbers. It's the little numbers on the side.

12 MR. AVRAM: 472, the little numbers on the
13 side. This is 486. This is 472 right here.

14 Q. If you look down at the -- the fifth paragraph,
15 this confirms what we've already talked about, which
16 was that "RJR HAD IN-HOUSE ANIMAL FACILITIES FOR
17 ABOUT THREE YEARS, DISBANDING THEM IN 1970";
18 correct?

19 A. Yes.

20 Q. Now your in-house --

21 A. That's what it says.

22 Q. Excuse me.

23 Your in-house scientists had been asking for RJR
24 to institute in-house testing since the '50s;
25 correct?

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1 MR. CRIST: Objection to the form of the
2 question.

3 A. They have recommended, yes.

4 Q. Doctors such as Dr. Rodgman --

5 A. Yes.

6 Q. -- and his colleagues --

7 A. Uh-huh.

8 Q. -- asked RJR numerous times --

9 A. Yes.

10 Q. -- to start in-house biological testing;
11 correct?

12 MR. CRIST: Objection to the form of the
13 question.

14 Q. Correct?

15 A. Dr. Rodgman has been on record as having done
16 that.

17 Q. And yet for some ten or more years RJR refused
18 those requests; correct?

19 MR. CRIST: Objection to the form of the
20 question, lack of foundation.

21 A. Well RJR did not start any biological research
22 until '64.

23 Q. So by implication, they refused the requests by
24 their own scientists for research facilities such as
25 biological testing facilities; correct?

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1 MR. CRIST: Objection to the form of the
2 question.

3 A. Well they did not start any biological research
4 till 1964 -- '64.

5 Q. Did you yourself take those kinds of
6 recommendations up to the vice president and
7 president?

8 A. Dr. Rodgman discussed that with me, and I
9 recommended that he pass on his idea to upper
10 management.

11 Q. Did you advocate for that position with upper
12 management?

13 A. I was in favor of doing that.

14 Q. Was that because you felt it was RJR's duty and
15 responsibility to the smokers and to the public in
16 general to undertake that kind of research?

17 MR. CRIST: Objection to the form of the
18 question, calls for a legal conclusion.

19 A. Well basically I agreed what Dr. Rodgman was
20 recommending.

21 Q. And did you agree with that because you felt
22 that a company such as RJR had a responsibility to
23 undertake such research?

24 MR. CRIST: Same objections.

25 A. Well it was my private opinion, but I realized

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1 that a decision of that magnitude has to be made by
2 upper management.

3 Q. Well my question is: Did you feel that your
4 company had a responsibility to its consumers and the
5 public in general to do such research?

6 MR. CRIST: Objection to the form of the
7 question.

8 A. You say "responsibility." At that time I did
9 not consider it, you might say, a responsibility.
10 No, I did not -- I would not say that a company had a
11 responsibility. Other factors had to be weighed in
12 that connection, whether or not the company itself
13 had to initiate research in-house on animal testing.

14 Q. Don't you believe a company has a responsibility
15 to make sure its products are safe?

16 MR. CRIST: Same objection, calls for a
17 legal conclusion.

18 A. Well in the first place, it was known at that
19 time that considerable research on smoking and health
20 was being conducted outside our laboratories, that we
21 also had established CTR to look into this, and there
22 was considerable work being done at the National
23 Cancer Institute, so that we felt looking at the
24 whole situation that this was a very, very active
25 field.

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1 Q. Well the fact of the matter is at the very time
2 that your own internal scientists were asking RJR to
3 institute biological testing in-house, there was an
4 agreement among the various manufacturers in the
5 industry not to do such in-house testing; correct?

6 MR. CRIST: Objection to the form of the
7 question.

8 A. I don't know anything about that --

9 Q. Why --

10 A. -- specifically.

11 Q. Why don't you look at Bates number 3504 on 1054,
12 Exhibit 1054.

13 MR. CRIST: 3504?

14 MR. O'FALLON: Right.

15 MR. AVRAM: 504 would be the last.

16 A. Yeah.

17 Q. The top of this page is entitled "SMOKING AND
18 HEALTH-RELATED RESEARCH CONDUCTED BY PHILIP MORRIS";
19 correct?

20 A. Yes.

21 Q. The fourth paragraph states that "THROUGHOUT THE
22 DOMESTIC INDUSTRY, TWO 'GENTLEMEN'S' AGREEMENTS WERE
23 OPERATIVE IN THE EARLY DAYS:" One, "ANY COMPANY
24 DISCOVERING AN INNOVATION PERMITTING THE FABRICATION
25 OF AN ESSENTIALLY 'SAFE' CIGARETTE WOULD SHARE THE

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1 DISCOVERY WITH OTHERS IN THE INDUSTRY." And two, "NO
2 DOMESTIC COMPANY WOULD USE INTACT ANIMALS IN-HOUSE IN
3 BIOMEDICAL RESEARCH"; correct?

4 MR. CRIST: Objection. Also --

5 A. That's what --

6 MR. CRIST: Excuse me. I'd also request
7 that for context the rest of this document -- the
8 rest of this page be read.

9 A. That's what that says, yeah.

10 MR. O'FALLON: Again, Counsel, let's just
11 keep it to "objection." You have plenty of time to
12 do redirect.

13 MR. CRIST: I'm just trying to invoke the
14 rule of completeness.

15 MR. O'FALLON: You have plenty of time to
16 do redirect.

17 BY MR. O'FALLON:

18 Q. Now you had numerous involvements with the other
19 tobacco manufacturers. Were you aware that there was
20 a gentlemen's agreement that no domestic company
21 would uses intact animals in-house in biomedical
22 research?

23 MR. CRIST: Objection to the form of the
24 question.

25 A. I was -- I had no -- I was not aware that there

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1 was an agreement. I was not aware, so anything I
2 might have known would have been a rumor only.

3 Q. Did you know about the rumor?

4 A. I heard a rumor.

5 Q. When did you first hear that rumor?

6 A. Let's see. Might have been '70, '75. I
7 couldn't place it.

8 Q. Did you hear that rumor about the time that RJR
9 management forced you to shut down the Mouse House?

10 MR. CRIST: Objection to the form of the
11 question.

12 A. About the time that this happened?

13 Q. Yeah, that RJR shut down the Mouse House.

14 A. It might have been close to that. I don't
15 know.

16 Q. Who did you hear that rumor from?

17 A. I don't recall.

18 Q. Would the authors of this particular doc --
19 document, Dr. Rodgman and Dr. Colby, would they have
20 more knowledge about that agreement than you?

21 MR. CRIST: Objection to the form of the
22 question.

23 A. Now, actually, when you're talking about me
24 hearing a rumor, at one point in time and this comes
25 much later, I don't connect the two -- two dates.

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1 Q. Okay. This isn't being talked of as a rumor in
2 this particular document, is it, sir?

3 A. True.

4 MR. CRIST: Objection.

5 A. Uh-huh, that's what it says, yeah.

6 Q. It doesn't say it's a rumor. It states it as a
7 matter of fact?

8 A. Yeah.

9 MR. CRIST: Objection.

10 Q. You closed down the Mouse House in 1970;
11 correct?

12 A. Yes.

13 Q. What type of testing was ongoing at the time you
14 shut the Mouse House down?

15 A. Well, we were testing compounds derived from
16 tobacco and other sources for possible use as
17 pharmaceuticals. We were testing compounds from
18 different sources to be used as -- in agronomy, so
19 that we were conducting a wide range of tests.

20 MR. O'FALLON: Let's mark this.

21 MR. CRIST: Thank you.

22 (Plaintiffs' Exhibit 1082 was marked
23 for identification.)

24 BY MR. O'FALLON:

25 Q. I've marked as Plaintiffs' Exhibit 1082 a

1 document Bates stamp numbered 50395 0745 through
2 0750.

3 Do you recognize this document, sir?

4 A. Yes.

5 Q. It states on the front "INTRODUCTORY REMARKS:
6 BY DR. SENKUS"; correct?

7 A. Yes.

8 Q. Is this your document?

9 A. It's a report of the meeting.

10 Q. Okay. This is the report of the meeting at
11 which time R.J. Reynolds disbanded its Mouse House;
12 correct?

13 MR. CRIST: Objection to the form.

14 A. That was -- that was the announcement.

15 Q. Okay. Approximately what date did this occur?

16 A. Oh, I don't see a date here.

17 Q. What's your recollection?

18 A. Oh, the best I can say, it might have been March
19 1970. I don't know exactly.

20 Q. Early 1970, would that be fairly accurate?

21 A. Yeah.

22 Q. Okay. So you basically called the people
23 together that were in your biological testing program
24 and said, "This is it, we're shutting it down";
25 correct?

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1 A. That's what we did.

2 Q. "The in-house biological testing in the
3 smoking-and-health area has been terminated";
4 correct?

5 MR. CRIST: Excuse me. Can you tell us
6 where you're reading here, Dan?

7 MR. O'FALLON: 0746, but I'm asking the
8 question. I'm not specifically reading from the
9 document.

10 MR. CRIST: Oh, I'm sorry.

11 MR. O'FALLON: When I'm reading from the
12 document, I'll state I'm reading from the document.

13 A. These were the remarks of Mr. Vassallo.

14 Q. At this meeting you told your employees that all
15 your in-house biological testing in the
16 smoking-and-health area was being terminated;
17 correct?

18 MR. CRIST: Objection to the form of the
19 question.

20 A. That's what the report says.

21 Q. And that's your recollection; correct?

22 A. Yes.

23 Q. This is a document that was generated in the
24 ordinary course of business; correct?

25 A. Yes.

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1 Q. And maintained in the ordinary course of
2 business?

3 A. Yes.

4 Q. And you were one of the authors of this
5 document?

6 A. One of the --

7 Q. Authors.

8 A. Well actually something as important as this and
9 considering that we were terminating people would
10 have involved the personnel department.

11 Q. Okay. But you were one of the people who
12 contributed to this document; correct?

13 A. Definitely.

14 Q. How much biological testing did you have ongoing
15 in the smoking-and-health -- health area at the time
16 that you decided to terminate this division?

17 A. It should be remembered that we got into this
18 possibly late '65, sixty -- early '66. We were
19 completely new in the area, and so we started a
20 number of projects and tried to get experience in
21 this field. So for some time we were just learning
22 the art of doing this kind of testing.

23 Q. My question is: How many ongoing projects in
24 the smoking-and-health area did you have as of the
25 date that you decided to shut down the Mouse House?

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1 MR. CRIST: Object to the form.

2 A. Specific projects in the smoking-and-health
3 area, as near as I can tell, if you can classify it
4 as such, projects of a very preliminary nature, might
5 have had two or three. That's hard to define
6 exactly, but this is a very preliminary work we were
7 doing.

8 Q. Would that include ongoing biological testing
9 such as mouse skin painting and inhalation tests?

10 A. I don't know that there was any -- well I -- I
11 know specifically what we were doing, exactly, but we
12 attempted to set up some inhalation work. We first
13 had to build a machine, so that took a lot of time
14 and effort. We had to hire people first and train
15 them, so it was very preliminary work.

16 MR. CRIST: I think the transcript may have
17 dropped a "don't."

18 MR. LAYDEN: I think you're correct.

19 Q. But how many ongoing projects do you recall
20 having in place at the time you decided to terminate
21 all in-house biological testing in the
22 smoking-and-health area?

23 A. Well when you say projects, specific projects,
24 they were carrying on different kinds of experiments,
25 so I could say it was just one project, overall

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1 project, or it could have been several -- several
2 parts of the whole project.

3 Q. Well, sir, you were there. Which is it? Which
4 was it? Was it one project? Was it numerous small
5 projects? Was there an inhalation test ongoing at
6 the time? What were you terminating?

7 A. Beg your pardon?

8 Q. What were you terminating? Was there an
9 inhalation test ongoing at the time that you decided
10 to terminate your biological testing in the
11 smoking-and-health area?

12 MR. CRIST: Objection to the form of the
13 question.

14 A. When you say an inhalation project at that time,
15 we were just -- we just had the machine built, so I
16 wouldn't call it an inhalation -- full-scale
17 inhalation experiment.

18 Q. Were you doing some inhalation tests on
19 animals?

20 A. Well we had a machine built for smoking, and we
21 were testing it out.

22 Q. Were you working on inhalation testing with
23 animals?

24 A. Well that was the aim of the smoking machine, to
25 ultimately maybe do inhalation on animals.

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1 Q. As of the time that you shut down the Mouse
2 House, did you have ongoing an inhalation project
3 with animals?

4 A. Well specifically the way you asked that
5 question, I don't know.

6 Q. What did you do with those animals when you shut
7 this down? Did you kill them?

8 MR. CRIST: Objection to the form of the
9 question.

10 A. The animals would have been disposed in what
11 would be considered a standard procedure, but as to
12 exactly what, I don't know.

13 Q. Well what did you do? Did you kill the animals
14 and then do pathological testing?

15 MR. CRIST: Objection.

16 A. I don't know. You see, the thing is I -- as
17 director of research, I didn't have to be that close
18 to know specifically what was done at each point.

19 Q. Did you give a specific directive that any
20 animal that had been subject to inhalation testing
21 before their body was disposed of should have a
22 complete pathological workup to determine whether any
23 adverse findings --

24 A. Okay.

25 Q. -- had been --

1 A. Okay.

2 Q. -- engendered during that inhalation testing?

3 A. Okay.

4 Q. Did you do that?

5 A. I did not feel it was necessary for me to give

6 any specific instruction to the person that was

7 directly overseeing that work.

8 Q. Well you're the one who's terminating the work.

9 Aren't you the one who has to make some decisions

10 about what's going to be done with that work now that

11 it's terminated?

12 MR. CRIST: Objection to the form of the

13 question, asked and answered.

14 A. As I mentioned, the person in charge of that

15 work, who was an experienced biological person, it

16 would be his responsibility to dispose of it in the

17 proper manner.

18 Q. Did the proper manner including doing full

19 pathological workup on the tissues of those animals?

20 A. I don't know what he did with them.

21 Q. Isn't that something you'd want to know as the

22 head of research?

23 A. I don't think so.

24 Q. You just would rather remain ignorant about --

25 MR. CRIST: Objection to the form of the

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1 question. You're becoming argumentative.

2 A. You know, here's a gentleman who knows his

3 business. He knows what the requirements are.

4 Q. And he's just --

5 A. He did what would be expected of him.

6 Q. And you've just fired him?

7 A. Beg your pardon?

8 Q. And you've just fired him?

9 A. No, we did not fire him.

10 Q. You fired 26 people, didn't you?

11 A. No, but he was one of those -- not one of those

12 people -- person. We didn't say "fire"; we

13 terminated them.

14 Q. Okay. I'm sure they appreciated that.

15 A. No, no.

16 MR. CRIST: Objection. That's not

17 necessary.

18 A. He was not one of those persons. He was not --

19 Q. Who is the person you're speaking of?

20 A. Talking about Dr. Eldon Nielson.

21 Q. And it's your testimony that Dr. Nielson was not

22 let go?

23 A. No, he was not let go.

24 Q. Was he transferred?

25 A. He was transferred to another area, and he

1 stayed on as long as he wanted.

2 Q. And how long did he stay on?

3 A. Well I think maybe two or three years, and he
4 went with another pharmaceutical company.

5 Q. Did he ever write up his complete findings from
6 the various animal research that was ongoing at the
7 time you terminated this research?

8 A. He kept a current monthly report.

9 Q. Was he allowed to continue and complete the
10 ongoing research?

11 A. Was he allowed to continue ongoing research?

12 Q. Was he allowed to complete whatever research he
13 had ongoing at the time you decided to shut down this
14 division?

15 A. Well, now that detail, I don't know that
16 detail. I mean, I would have to be speculating as to
17 exactly what occurred at that point when the project
18 was -- project was terminated.

19 Q. As the head of research, didn't you want to make
20 sure that whatever findings had been made up to this
21 point in time were preserved?

22 MR. CRIST: Objection to the form of the
23 question.

24 A. Well, my feeling is that when Dr. Nielson wrote
25 his final report, that it was reported in sufficient

1 detail.

2 Q. When did he write that final report?

3 A. I guess -- I mean, I'm guessing. I'd have to
4 look at the records, but it would have been -- like
5 if he wrote -- wrote a monthly report, it would have
6 been in the preceding month.

7 Q. Did he ever write a report that summarized all
8 the findings on the research done in the Mouse
9 House?

10 A. The re -- the final report, the monthly report
11 that he wrote I think constituted a complete report
12 what was being done up until that time.

13 Q. You understand that while animals are still
14 receiving smoke or mouse skin painting, you can't do
15 a final report on them because you don't have the
16 ability to execute the animals and take a look at the
17 pathological tissues; correct?

18 MR. CRIST: Objection to the form of the
19 question. I think it's vague.

20 A. Again, it all depends on how you look at this
21 thing. I mean, it's obvious he kept current reports,
22 and so the work was reported in a -- in a
23 satisfactory scientific fashion.

24 Q. But some findings can't be reported on until the
25 end of an experiment; correct?

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1 MR. CRIST: Objection to the form of the
2 question.

3 A. You say "some findings."

4 Q. Well, for instance, Doctor, if I'm doing an
5 inhalation study, I'm not going to know exactly what
6 happens in the lungs of that mouse or that dog or
7 that cat until we have the opportunity to actually --
8 till the animal either dies or you execute the
9 animals and then you can go in and take pathol -- and
10 take cuts of the tissue and have it analyzed
11 pathologically; correct?

12 MR. CRIST: Objection to the form of the
13 question.

14 A. Well you're -- you're discussing here a
15 procedural matter, and if the work is terminated,
16 it's terminated.

17 Q. And if the animals are killed, my question is:
18 Were the animals killed?

19 A. I don't know. I don't know what happened to the
20 animals.

21 Q. Do you know whether final pathological findings
22 were made on all the animals that were in the Mouse
23 House?

24 A. I don't know.

25 Q. Wouldn't you want to make sure that work was

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1 done as the head of research?

2 MR. CRIST: Objection to the form of the
3 question.

4 A. I mentioned that decision was left up to
5 Dr. Nielson, and he's the experienced director of
6 biological research. That would be his decision, and
7 I'm sure he acted in a professional manner.

8 Q. Wouldn't R.J. Reynolds, who's stated publicly
9 that they're going to put the health of the consumers
10 above all other business considerations, want to have
11 made sure that they had full findings of whatever
12 research that they had done during that period when
13 they had the Mouse House?

14 MR. CRIST: Objection to the form of the
15 question. You're being argumentative.

16 A. I repeat that that was left up to Dr. Nielson,
17 and I can assure you, I want to make it very clear
18 that whatever we did was of a very preliminary
19 nature. We're just getting our feet wet in the
20 business so that I don't know what you're getting
21 at.

22 Q. So it took ten years for the scientists to
23 convince RJR to do some in-house testing, and before
24 they really had a chance to even get the in-house
25 testing going, RJR terminated that in-house testing;

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1 correct?

2 MR. CRIST: Objection to the form of the
3 question. This is not a closing argument.

4 A. Say what is exactly your question.

5 Q. It took ten years for the scientists at RJR to
6 convince RJR to do in-house biological testing.

7 A. Yeah, uh-huh.

8 Q. And then it's your testimony that before the RJR
9 scientists had even gotten the testing past a
10 preliminary stage, RJR terminated that testing;
11 correct?

12 MR. CRIST: Object to the form of the
13 question.

14 A. I'm trying to understand your question. You're
15 asking me why wasn't -- why didn't they look at the
16 results? Is that what you're asking me?

17 Q. Well no, that's what I've been asking you up
18 till now. What I'm asking you now is a different
19 question. I said: Isn't it true that it took RJR
20 scientists ten years to convince this company to
21 finally do some biological research in-house, and yet
22 before you'd even gone past, based on your testimony,
23 the preliminary stage, RJR pulled the plug on that
24 testing?

25 MR. CRIST: Object to the form of the

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1 question.

2 A. Okay.

3 MR. CRIST: Object on the basis of
4 argumentative.

5 A. As you put it "pulled the plug," there was a
6 reason, a specific management reason, why the thing
7 was terminated.

8 Q. Well, and one of the management reasons had to
9 do with the fact that there was a gentlemen's
10 agreement not to do biological --

11 A. Has nothing to do with that.

12 Q. Let me complete my question. That there was a
13 gentlemen's agreement not to do in-house biological
14 testing and other manufacturers, including Philip
15 Morris, found out that RJR was doing this in-house
16 testing; correct?

17 MR. CRIST: Objection to the form of the
18 question. I also object on the basis of inconsistent
19 prior testimony.

20 A. I want to make it very clear that, insofar as I
21 am personally concerned, that the decision was made
22 on business reasons, on management reasons. There
23 was a change in management. They decided they didn't
24 want to continue this work, it could be done outside
25 the company, and so it was terminated.

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1 Q. But you didn't shift all this work outside the
2 company, did you?

3 A. Well we kept some of it. For example, we kept
4 some testing of -- for the starch company.

5 Q. How about the smoking-and-health research? You
6 didn't shift all of that outside the company, did
7 you?

8 A. Smoking and health? What were you --

9 Q. What's referred to specifically in your memo.

10 A. What does it say?

11 Q. "In-house biological testing in ... smoking and
12 health area"

13 A. Yeah.

14 MR. CRIST: Objection, ask you to complete
15 the sentence you're reading from.

16 Q. "... such as the work we have been doing for the
17 Scientific Advisory Board of the Council for Tobacco
18 Research"; correct?

19 A. You're talking about the smoking machine?

20 Q. I don't know. I'm talking about any smoking and
21 health. Sir, I wasn't there.

22 A. Okay. Let's be specific now.

23 MR. CRIST: Can you repeat the question?

24 A. Refer me to a sentence so that I can respond.

25 MR. AVRAM: Dan, can you repeat the

1 question for Dr. Senkus, please.

2 Q. You didn't move the in-house biological testing
3 in the smoking-and-health area to an outside source,
4 did you?

5 A. It was agreed that whatever biological testing
6 is to be done would be done outside the company.

7 Q. I understand that, but did you take the testing
8 and the animals and the inhalation testing and other
9 testing that you had ongoing at RJR as of 1970 and
10 say, "Okay, we're not going to do this, but here, you
11 take our animals, you take our machines, you do this
12 work," and give it to some outside group?

13 MR. CRIST: Objection to the form of the
14 question.

15 A. So you're asking me if we did that?

16 Q. Yes.

17 A. No, we didn't.

18 Q. No. And you didn't move it overseas; right?

19 A. No.

20 Q. You just basically killed the animals and
21 terminated the research; correct?

22 MR. CRIST: Objection to the form of the
23 question, asked and answered as well.

24 Q. Correct?

25 A. Well as I explained, first of all, the work was

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1 of a very preliminary nature. The change in
2 management, the new manager, the new management of
3 the company, decided they did not want to continue to
4 do it in-house because we really -- they felt we did
5 not have the kind of expertise, it could be done
6 outside, so they -- we terminated. It was a change
7 in management.

8 Q. Weren't they also concerned that you were going
9 to get positive results such as your inhalation tests
10 were going to produce emphysema or lung cancer and
11 that would be sitting in your files and you'd have to
12 produce it in smoking-and-health litigation?

13 MR. CRIST: Objection, calls for
14 speculation.

15 A. They have no way of knowing how long it would
16 take to get positive results.

17 Q. But they recognized that was a certain
18 possibility, didn't they?

19 A. I don't know. How could I tell?

20 Q. Did anybody ever ask you? You were the head.

21 A. Well, if they had asked me, I would have told
22 them it's going to take a long -- much longer time,
23 and it would have been logical to -- to -- to --
24 to -- to suspend the work. They had no way of
25 knowing how long it would take.

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1 Q. Wouldn't it be more logical to continue to do
2 the work and see whether or not your products were
3 safe?

4 MR. CRIST: Objection on the basis that
5 this calls for improper speculation and opinion.

6 A. It was considered. The management decided that
7 the kind of effort it would take, it would be better
8 to do it outside, and you must remember that this
9 project contained other testing besides animal
10 testing in smoking and health. We were doing
11 pharmaceutical research, and so we were no --
12 certainly no longer interested in -- in -- in getting
13 into pharmaceutical work.

14 Q. You could certainly terminate the pharmaceutical
15 work and keep the smoking-and-health work, couldn't
16 you?

17 A. Well --

18 MR. CRIST: Objection.

19 A. -- on the scale we thought it would be desirable
20 to do it, it would -- we were not able to do it with
21 our capabilities.

22 Q. Okay. And who did RJR contract with after it
23 shut down the Mouse House to continue the inhalation
24 testing that was being done in the Mouse House?

25 A. That whatever biological testing was done

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1 outside was done by IBT.

2 Q. Did IBT do inhalation testing?

3 A. I'm not sure. I -- I can't -- I can't recall
4 exactly.

5 Q. Did you ever publicly report any of the results
6 you re -- received from your in-house testing?

7 A. From our own in-house testing?

8 Q. Yes, your Mouse House testing.

9 A. I don't recall that we did or did not.

10 Q. I'm going to show you a document that's been
11 previously marked as Plaintiffs' Exhibit 140.

12 MR. CRIST: I'm sorry, what was the
13 number?

14 MR. O'FALLON: 140. This was also marked
15 as a different exhibit in the Rodgman deposition, and
16 frankly I should have kept the 140 exhibit.

17 MR. CRIST: Do you happen to know what the
18 number in the Rodgman --

19 MR. O'FALLON: I don't remember off the top
20 of my head.

21 BY MR. O'FALLON:

22 Q. Have you seen this document previously?

23 A. I don't recall. No, not this one.

24 Q. This is -- discusses a meeting with Dr. Helmut
25 Wakeham; correct?

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1 MR. CRIST: This -- do you -- do you know
2 who produced this document, Dan?

3 MR. O'FALLON: I assume it's British
4 American Tobacco.

5 MR. CRIST: There was -- there -- there
6 appears -- I'm sorry just to interrupt, but there
7 appears to be some kind of a legend on the bottom of
8 this, and it may be B.A.T. or something. Do you know
9 what that says?

10 MR. O'FALLON: Let's go off the record.

11 THE REPORTER: Off the record, please.

12 (Discussion off the record.)

13 MR. CRIST: Yeah, let me just interpose
14 this objection: This is a document which was not
15 predesignated for purposes of this deposition.

16 MR. O'FALLON: That's not true. I think
17 I'd predesignated the Rodgman exhibits, didn't I?
18 You want me to pull out -- you want me to pull out
19 1055?

20 MR. CRIST: I don't believe it was
21 predesignated for Dr. Rodgman either.

22 MR. O'FALLON: You don't?

23 MR. CRIST: That's right. That's my --
24 that's my belief. If I'm wrong, I'm wrong.

25 MR. O'FALLON: Well I predesignated for

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1 this deposition any documents used in the Rodgman
2 deposition.

3 MS. FORBES: When -- when did you do that,
4 Dan?

5 MR. O'FALLON: I did that with Jonathan
6 Redgrave last week.

7 MS. FORBES: In the initial
8 predesignation?

9 MR. O'FALLON: I think I did.
10 Let's go off the record.

11 THE REPORTER: Off the record, please.
12 (Discussion off the record.)

13 MR. CRIST: I will withdraw my objection
14 with respect to predesignation.

15 MR. O'FALLON: And you're going to withdraw
16 that because in fact this document was predesignated
17 by predesignated dated June 9th, 1997; correct?

18 MR. CRIST: I don't know what the date of
19 it is, but I have seen this document among the
20 documents --

21 MR. O'FALLON: Why don't you read that.

22 MR. CRIST: -- among the documents that
23 were either predesignated for Dr. Rodgman or for
24 Dr. Senkus. I apologize for any inconvenience.

25 MR. O'FALLON: Mark this as a deposition

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1 exhibit.

2 (Plaintiffs' Exhibit 1083 was marked
3 for identification.)

4 MR. O'FALLON: I marked as a deposition
5 exhibit my predesignation of June 9th, 1997, for the
6 record. It's marked as Exhibit 1083.

7 BY MR. O'FALLON:

8 Q. Dr. Senkus, have you seen this particular
9 document?

10 A. No, I have not.

11 Q. Let's turn specifically to page 110315969 under
12 "Philip Morris Affairs."

13 A. Yes.

14 Q. It says "One result of the greater influence
15 which Wakeham has with" Dr. "J. Cullman has been the
16 agreement, albeit reluctant, to permit Philip Morris
17 to do 'in-house' biological work"; correct?

18 MR. CRIST: Objection.

19 A. You want me to read that?

20 Q. I'm asking you if that's what it says. Is that
21 what the document says, what I just read?

22 A. Yes.

23 Q. Okay. It then goes on to say "When this was
24 first mooted, Wakeham was told that there was a tacit
25 agreement between the heads of the US Companies that

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1 this would not be done"; correct?

2 A. That's what it reads.

3 MR. CRIST: Objection.

4 Q. Okay. "Wakeham had countered by saying he knew
5 that Reynolds, Lorillard and American were all
6 undertaking some and that Liggett and Myers had never
7 been party to the agreement"; correct?

8 A. That's what it says.

9 Q. Okay. "Cullman" -- and that's the president of
10 RJR; correct?

11 MR. CRIST: Objection.

12 A. No, no, he was president of Philip Morris.

13 Q. I mean, I'm sorry, president of Philip Morris.
14 "... had been incredulous and" he "phoned Galloway,
15 the President of R.J. Reynolds who had denied
16 Reynolds" was "doing any bioassay"; correct?

17 MR. CRIST: Objection.

18 Q. That's what it says; right?

19 A. Yes.

20 Q. Okay. It says "When Cullman ... told Wakeham
21 this, Wakeham's response had been to quote the
22 Reynold's work on the Senkus smoking machine and to
23 claim he had floor plans showing outline area
24 allocations"; correct?

25 MR. CRIST: Objection.

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1 A. Actually, if you read that sentence, "When
2 Cullman had told Wakeham this, Wakeham's response had
3 been to quote the Reynold's work on the Senkus
4 smoking machine and to" think he had -- "and to claim
5 he had floor plans showing outline area allocations,"
6 I'm not sure what that -- I'm not sure what that
7 means.

8 Q. Well apparently Wakeham is telling the president
9 of Philip Morris that he has a schematic showing an
10 outline for Reynolds' allocations of space for its
11 biological research; correct?

12 MR. CRIST: Objection.

13 A. September 1970, yeah. September '70. Well at
14 this point --

15 Q. At this point the research has been shut down;
16 right?

17 A. That's right.

18 Q. But we're going to get to that. It's coming
19 up.

20 It said "This ... had been relayed to Galloway
21 by Cullman" So in other words, you have the
22 president of PM, Philip Morris, calling the president
23 of Galloway -- of -- of R.J. Reynolds, Galloway, and
24 saying, "We have proof that you're doing biological
25 research"; correct?

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1 MR. CRIST: Objection to the form of the
2 question. Are you asking him to interpret what he
3 thinks this means?

4 Q. Is that your understanding of what Wakeham's
5 saying?

6 MR. CRIST: Objection.

7 MR. AVRAM: Excuse me, Dan. I was under
8 the impression you were asking him whether this is
9 what this document says. Am I --

10 MR. O'FALLON: That's what I'm asking.

11 MR. AVRAM: Did I miss something?

12 MR. O'FALLON: That's what I'm asking.

13 A. So you're asking me whether this sentence "When
14 Cullman" and so on to "allocations," you ask me if
15 that's what the document says?

16 Q. Right.

17 A. Yes.

18 Q. And do you -- and it basically says that
19 Galloway then visited your research department and
20 found out that in fact biological research was
21 ongoing.

22 MR. CRIST: Objection.

23 Q. Did Galloway know about biological research
24 prior to 1970?

25 A. The only thing I know about Galloway is this,

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1 that before Dr. Bright left the company, he had shown
2 Mr. Galloway our work, but this would have been
3 before -- long before the project was terminated, and
4 it's the only thing I know.

5 Q. Did Galloway know that you had ongoing animal
6 testing?

7 A. Well actually he visited the laboratory before
8 Mr. Bright left. That I know.

9 Q. What year was that?

10 A. Huh?

11 Q. What year was that?

12 MR. CRIST: Objection, asked and answered.

13 A. Before Bright left.

14 Q. No, no, I know. What year?

15 MR. CRIST: Same objection.

16 A. This would have to be in '68.

17 Q. Okay. So sometime in '68, Galloway visited the
18 research facilities?

19 A. Insofar as I can remember.

20 Q. Do you remember him coming back down in late
21 1969, early 1970?

22 A. Now that I don't remember.

23 Q. Do you remember him talking to you about the
24 biological research that was ongoing?

25 A. No, we -- Mr. Galloway and I never discussed

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1 it.

2 Q. Wakeham then goes on to state that "There had"
3 then "been a sudden reorganization at Reynolds,
4 resulting in the closure of the biological section";
5 correct?

6 MR. CRIST: Objection.

7 A. That's what it says.

8 Q. Wakeham also thought that Nielson had resigned;
9 right?

10 MR. CRIST: Objection.

11 A. This is not correct.

12 Q. It's your testimony that Dr. Nielson did not
13 resign?

14 A. Well, I don't know what the date is, but at --
15 at some point Dr. Nielson continued with the company
16 after the closure, and after some period he went with
17 a pharmaceutical firm in Evansville, Indiana.

18 Q. Okay. This document was written on September
19 10th of 1970. As of September 10th of 1970, is it
20 your testimony that Dr. Nielson was still with R.J.
21 Reynolds?

22 MR. CRIST: Objection.

23 A. 1970, see, that's pretty close. I can't
24 really -- I know he stayed on for a while. Now how
25 long, I -- I cannot recall.

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- 1 Q. Okay. Do you know --
- 2 Do you know whether American was doing any
- 3 in-house biological research during this time
- 4 period?
- 5 A. No, I do not know.
- 6 Q. Did you have any contact with American?
- 7 A. I had some contact with American, but -- but
- 8 no -- I had some contact, but nothing in regard to
- 9 animal testing.
- 10 Q. Who was their research director?
- 11 A. Preston Leake at the time.
- 12 Q. And do you know whether or not Dr. Leake
- 13 conducted or directed any biological research at
- 14 American?
- 15 A. I haven't the slightest idea.
- 16 Q. Have you ever heard of a facility known as
- 17 Bermuda Hundred?
- 18 A. No, I know nothing about that.
- 19 Q. Are you familiar with something called the
- 20 Brubaker report?
- 21 A. No, I'm not.
- 22 Q. You've never heard that term at all?
- 23 A. I've heard the name "Brubaker," but I don't know
- 24 what it means.
- 25 Q. In what context did you hear the term

1 "Brubaker"?

2 A. Beg your pardon?

3 Q. In what context did you hear the term

4 "Brubaker"?

5 A. I -- I can't recall. I mean, the name doesn't
6 mean anything to me.

7 Q. At some point did a company by the name of
8 Brubaker come in after the closing of the Mouse House
9 and assess all the testing that had been done?

10 A. I don't know.

11 Q. Do you recall some outside firm being hired to
12 come in and assess all the -- all the testing that
13 had been done in the Mouse House?

14 A. I know nothing about that.

15 Q. If that had been done, it would have certainly
16 had to have gone through you; correct?

17 MR. CRIST: Objection --

18 A. Oh, no.

19 MR. CRIST: -- to the form of the question.

20 A. Why should it?

21 Q. So it's your testimony that a third party could
22 be hired by the company and come in and assess your
23 biological testing and that you as the director of
24 research would know nothing about that?

25 MR. CRIST: Objection to --

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1 A. When was that done?

2 MR. CRIST: -- the form of the question,
3 also object to lack of foundation.

4 A. When was that done that you know of?

5 Q. I'm not particularly certain. I think it's
6 being claimed as a privileged document.

7 A. Well I -- it certainly was not -- as far as I
8 can tell, it was not done through 1979, as far as I
9 can remember.

10 Q. So it's your testimony that a Brubaker report
11 was never generated?

12 MR. CRIST: Objection. That is not his
13 testimony.

14 A. I don't know.

15 Q. Your testimony is you just don't know?

16 A. I just don't know.

17 Q. And it's your testimony that a third party could
18 come in and assess all your research without you
19 knowing about it?

20 MR. CRIST: Objection to the form of the
21 question.

22 A. Well now what -- tell me the date that this was
23 done.

24 Q. Sir, if I knew that, I'd be steps ahead.

25 MR. CRIST: I can tell you.

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1 MR. O'FALLON: Well why don't you.

2 MR. CRIST: 1985 I think is when
3 Dr. Brubaker was commissioned by Jones Day to
4 undertake this -- this evaluation for use in
5 assisting us in defending the litigation then pending
6 and reasonably anticipated against Reynolds.

7 A. I was in Indonesia at the time.

8 Q. Have you ever seen that report since?

9 A. No, I haven't.

10 Q. Did anyone at RJR internally prior to 1985 go
11 through and assess all of the testing that had been
12 done in the Mouse House?

13 A. Assess all the work that was done?

14 Q. Yes.

15 A. No, not that I can recall.

16 Q. In essence, was that work lost when you
17 terminated the Mouse House?

18 MR. CRIST: Objection to the form of the
19 question.

20 A. Well it's not lost because we have the monthly
21 reports.

22 Q. The monthly reports again wouldn't include the
23 final results; correct?

24 MR. CRIST: Objection to the form of the
25 question. I also object it's been asked and

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1 answered.

2 A. Insofar as I'm concerned, Dr. Nielson re --
3 prepared excellent reports, monthly reports, and so
4 all those monthly reports are in the record.

5 Q. Were there ever any final reports prepared for
6 any of the testing done at the Mouse House?

7 MR. CRIST: Objection, been asked and
8 answered.

9 A. A final report is generally prepared, from a
10 good scientific practice, when the work is finished.

11 Q. Was there ever any work finished in the Mouse
12 House?

13 A. And so there was really at that time
14 insufficient work to draw any conclusions, and so
15 that the results in the monthly reports report
16 whatever conclusions could have been made.

17 Q. Is it your testimony that none of the biological
18 work regarding smoking and health in the Reynolds
19 Mouse House was ever completed?

20 A. Well, now was -- were ever completed, you say?

21 Q. Yes, to the point where a final report was
22 generated.

23 A. Well, if a piece of work had been completed, as
24 would be regarded by the investigator, he would have
25 written a final report.

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1 Q. My question is: Was any work ever completed?

2 A. I don't -- I cannot -- I don't know that answer
3 because I can't recall specifically. Some projects
4 may have been completed, but I'm not sure.

5 Q. When you closed the Mouse House, did you tell
6 the investigators to make their best efforts to
7 complete the projects, if at all possible?

8 MR. CRIST: Objection to the form of the
9 question, also object it's been asked and answered.

10 A. Well when -- when we announced the termination,
11 the work -- ongoing work -- the ongoing work at that
12 time could be terminated at that point, and as I
13 felt, it did not need any further continuation
14 because it was all, as far as I was concerned,
15 exploratory.

16 Q. So your answer would be no, nobody was ordered
17 to try to complete the work?

18 MR. CRIST: Objection to the form of the
19 question.

20 A. Well if -- if such a re -- a report were to be
21 given, it would have been given by Dr. Nielson, and
22 he was a -- a good investigator and -- and he knew
23 what would be expected of that particular sit --
24 situation.

25 Q. But ultimately you were the head of the -- head

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1 of the research department, and it would be up to you
2 to tell him if you wanted work completed, if
3 possible; correct?

4 MR. CRIST: Objection to the form of the
5 question. You're going over old territory.

6 A. I feel -- I think I have answered the question
7 sufficiently on that particular point.

8 Q. Do you recall a Dr. Price?

9 A. No, I don't. I don't specifically recall a
10 Dr. Price. No, that doesn't ring a bell.

11 Q. So you can't tell me whether he was or wasn't an
12 R.J. Reynolds employee?

13 A. I can't at this point.

14 MR. CRIST: Dan, when we get to an
15 appropriate break --

16 MR. O'FALLON: After this document.

17 MR. CRIST: Sure.

18 (Plaintiffs' Exhibit 1084 was marked
19 for identification.)

20 BY MR. O'FALLON:

21 Q. I've had marked as Exhibit 1084 a document
22 that's Bates stamp numbered 1001882748 through 2749,
23 although if you look at the second page of that
24 document, you'll see it's simply an inverted copy of
25 the first page. But this is how it was produced to

1 us.

2 Have you ever seen this document previously?

3 A. I don't recall.

4 MR. CRIST: I believe that this was
5 produced by Philip Morris; is that correct?

6 MR. O'FALLON: That is correct.

7 Q. This document states this is from -- it appears
8 to be either from a Weissbecker or a Carpenter dated
9 December 15th of 1969; correct?

10 A. These two employees are Philip Morris employees
11 I guess, yeah.

12 Q. Do you know either of those two people?

13 A. I know a Mr. Carpenter.

14 Q. Okay. And who was that?

15 A. He was an investigator at Philip Morris, whom I
16 had known previously at Commercial Solvents.

17 Q. He was a previous colleague of yours?

18 A. Maybe.

19 Q. Well he either was or he wasn't.

20 A. Well, I mean, we spoke to each other in the
21 hallway.

22 Q. Okay. You worked together? You worked --

23 A. Not --

24 Q. -- at the same place?

25 A. Not directly. Worked at the same place, yes.

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1 Q. Okay. Anyhow, there's a report here that the
2 person whoever wrote this from Philip Morris met
3 Dr. Price from R.J. Reynolds at the CTR-USA meeting
4 of December 11th and 12th, 1969; correct?

5 A. That's what it says.

6 Q. It says Dr. Price mentioned doing chronic
7 cigarette smoke exposure studies with rats; correct?

8 A. That's what it says.

9 MR. CRIST: Objection to the form.

10 Q. Were such studies ongoing at R.J. Reynolds in
11 1969 in the Mouse House?

12 A. I specifically do not recall this.

13 Q. Do you recall RJR doing any inhalation studies
14 with rats in the Mouse House?

15 A. These are rats. We were developing a smoking
16 machine. We designed a smoking machine. We were in
17 a sense trying to design a machine. We need to
18 develop a technique how to expose the animals, so to
19 that extent, we were conducting inhalation studies.

20 Q. Okay. Dr. Price apparently told Philip
21 Morris -- Philip Morris that the animals received up
22 to 500 cigarettes and emphysema was produced;
23 correct?

24 MR. CRIST: Objection to the form of the
25 question, assumes facts not in evidence.

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1 A. That's what it says.

2 Q. Did you know that in your own laboratory there
3 were inhalation tests ongoing in which emphysema had
4 been produced?

5 MR. CRIST: Objection to the form of the
6 question, assumes facts not in evidence.

7 A. This is what the report says.

8 Q. Emphysema's a disease in humans that's been
9 linked with cigarette smoking; correct?

10 A. Emphysema -- there is an emphysema in humans,
11 yes.

12 Q. And it's been linked with cigarette smoking;
13 correct?

14 A. You say there have been that emphysema is linked
15 with cigarette smoke, you say?

16 Q. Yes.

17 A. Some reports say that, yes.

18 Q. As a matter of fact, people claim that cigarette
19 smoking causes emphysema; correct?

20 MR. CRIST: Objection to the form.

21 A. Some people are saying that.

22 Q. And it appears that your own in-house testing
23 would support that conclusion; correct?

24 MR. CRIST: Objection to the form of the
25 question.

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1 A. Well that's what this report says.

2 Q. And you can't tell me that it's wrong; correct?

3 MR. CRIST: Objection.

4 A. I don't know.

5 Q. You don't know whether R.J. Reynolds did or did
6 not do this research; correct?

7 A. Do what?

8 Q. You don't know whether R.J. Reynolds did this
9 research; correct?

10 MR. CRIST: I object to the form of the
11 question.

12 A. This is what Dr. Price says in this report.

13 It's -- it's written here that way, but --

14 Q. Did Dr. Price ever report in the literature that
15 during testing at RJR he was successful in inducing
16 emphysema in rats after having them inhale cigarette
17 smoke?

18 MR. CRIST: Objection to the form of the
19 question. I object on the basis it assumes facts not
20 in evidence.

21 A. I have not seen any report like that.

22 Q. Is that something that should have been
23 published, if in fact R.J. Reynolds did produce those
24 results on inhalation testing?

25 MR. CRIST: Objection on the basis it calls

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1 for improper opinion testimony.

2 A. Repeat that question, please.

3 Q. Well let me restate it.

4 You would consider a finding of emphysema upon
5 inhalation of cigarette smoke by rats to be a
6 significant finding; correct?

7 A. I would look at it this way: If you find some
8 preliminary work that you find you think produces
9 emphysema of a preliminary nature, you don't rush in
10 to print.

11 Q. At the very least, you should follow up on that
12 work; correct?

13 MR. CRIST: Objection to the form.

14 A. I would say that there's nothing here in this
15 report, this memorandum, that would suggest it would
16 be necessary to follow up or not to follow up. I --
17 I -- this -- this is sort of a vague statement. This
18 is -- could be hearsay.

19 Q. Are you a lawyer?

20 A. Huh?

21 MR. CRIST: Objection.

22 Q. Are you a lawyer?

23 MR. CRIST: Objection. You're being
24 argumentative. He's already described to you his
25 background.

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1 A. Beg your pardon?

2 Q. Are you telling me from a legal conclusion it's
3 your conclusion that's hearsay?

4 MR. CRIST: Objection, improper.

5 A. So what's the question?

6 Q. Let me ask you this: You were there. Did or
7 did not this study occur?

8 MR. AVRAM: Asked and answered.

9 A. I specifically don't know.

10 Q. Okay. You would agree that a responsible
11 company, if they did in-house testing that pre --
12 that produced emphysema, should at the very least
13 follow up on that research and continue to do that
14 research; correct?

15 MR. CRIST: Object to the form of the
16 question, calls for a legal conclusion.

17 A. Well as I mentioned before, whatever work we did
18 as late as '69 was of a very preliminary nature. The
19 laboratory was shut down in 1970.

20 Q. Move to strike as nonresponsive.

21 If in fact you have evidence that you're
22 producing emphysema in animals, it's not responsible
23 to shut that work down, is it?

24 MR. CRIST: Objection to the form of the
25 question. Object that it's argumentative. I also

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1 object on the basis it calls for a legal conclusion.

2 A. So where are we?

3 MR. CRIST: I'm not sure he had the
4 question in mind.

5 Q. If in fact you have evidence that you're
6 producing emphysema in animals, it's not responsible
7 to shut that work down, is it?

8 MR. CRIST: Same objections.

9 A. Well my answer to that would be this: It
10 depends entirely on the status of that work, and if
11 the status were such that it needs to be continued
12 further, it would be done outside the company after
13 the shutdown of the experiments.

14 Q. Did R.J. Reynolds after the shutdown of these
15 experiments contract for inhalation testing in rats
16 looking for emphysema while you were there?

17 A. Well at that time there was considerable work
18 being done outside the company -- outside the
19 company.

20 Q. Move to strike as nonresponsive.

21 My question was: Did R.J. Reynolds after the
22 shutdown of these experiments contract for inhalation
23 testing in rats looking for emphysema?

24 MR. CRIST: Objection, asked and answered.

25 A. Did we contract, yes or no? '69 we did not.

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1 Q. You mentioned that you did contract following
2 the shutdown of the Mouse House with IBT; correct?

3 A. Yes, uh-huh.

4 MR. CRIST: Excuse me, Dan.

5 MR. O'FALLON: Oh, you want to take a
6 break?

7 MR. CRIST: I'd asked for that, yeah, if
8 that's okay.

9 MR. O'FALLON: Yeah, let's take a break.

10 THE REPORTER: Off the record, please.

11 (Recess taken.)

12 BY MR. O'FALLON:

13 Q. I just want to clear up a few things about
14 the -- the past testimony.

15 Dr. Senkus, were you ever aware of emphysema
16 being produced in rats at testing that took place at
17 RJR?

18 A. No, I was not.

19 Q. Okay. From the time that the Mouse House was
20 shut down in 1970 until the time you left RJR in
21 1979, did RJR undertake any biological work
22 in-house?

23 A. Not that I can recall.

24 Q. So from 1951 to 1979, a period of approximately
25 28 years, RJR only did in-house biological testing

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1 for 3 of those 28 years; correct?

2 A. Yes.

3 MR. CRIST: Objection. Objection to the
4 form of the question.

5 Q. I believe you testified earlier that following
6 the shutdown of the Mouse House, some work was
7 contracted out with a lab by the -- by the name of
8 Industrial Bio-Test; correct?

9 A. Yes.

10 Q. I'm going to hand you a document that's been
11 previously marked as Plaintiffs' Exhibit 1053.

12 Have you seen this document previously?

13 A. Yes, I have.

14 Q. This is a document that's written to you from
15 Alan Rodgman; correct?

16 A. Yes.

17 Q. And you would have received this in your
18 ordinary course of business; correct?

19 A. Yes.

20 Q. And maintained it in your ordinary course of
21 business?

22 And maintained the document in the ordinary
23 course of R.J. Reynolds' business?

24 A. Yes, uh-huh.

25 Q. This concerns some testing on a substance known

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1 as G13 expanded tobacco; correct?

2 A. Yes.

3 Q. And G13 is tobacco that R.J. Reynolds expanded
4 with a substance known as Freon 11; correct?

5 A. Yes.

6 Q. That's the same substance that's used in
7 air-conditioning units; correct?

8 MR. CRIST: Objection to the form of the
9 question, assumes facts not in evidence.

10 A. Not in air-conditioning.

11 Q. It's not used as a coolant?

12 A. It -- yeah, it's used as a coolant. I think, if
13 I'm not mistaken, there's another Freon used in
14 air-conditioning.

15 Q. Okay. What else do they use this Freon 11 for
16 as a coolant?

17 A. Oh, I don't know exactly. I'd be -- I don't
18 know specifically, but it might have some other
19 applications in puffing or something like that, other
20 materials, maybe also as a propellant.

21 Q. Okay. Doctor, in 1973 you asked the Industrial
22 Bio-Test labs to perform basically three types of
23 tests on your expanded G13 tobacco; correct?

24 A. Yes.

25 Q. One of those tests was an acute toxicity test;

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1 correct? You might want to look at the second page.

2 A. Okay.

3 Q. Up there at the top.

4 A. Yes. Okay, yes.

5 Q. Okay. So the first test was an acute toxicity
6 test?

7 A. Yes.

8 Q. The second test was "The Effect of Expanded
9 Tobacco Smoke on ... Phagocytic Activity of Alveolar
10 Macrophages in vitro"; correct?

11 A. Yes.

12 Q. That's a long term for basically the effect of
13 tobacco smoke on cells; correct?

14 MR. CRIST: Object to the form of the
15 question.

16 Q. Is that what you're basically looking for
17 there?

18 A. Whatever it says.

19 Q. Okay. Are you familiar with those terms, sir?

20 A. If I was familiar at that time, I do not -- I
21 could not define it for you at this time.

22 Q. Okay. Are you familiar with what alveolar
23 macrophages do in the lung?

24 MR. CRIST: I think that's alveolar
25 macrophages.

1 MR. O'FALLON: You're right.

2 Q. Alveolar macrophages, are you familiar with what
3 those do in the lung?

4 MR. CRIST: I object to the form of the
5 question.

6 A. In vitro. Yeah, this is -- would be an
7 experiment conducted in -- in a test tube.

8 Q. Right. Outside the body is "in vitro";
9 correct?

10 A. Yes, uh-huh.

11 Q. The last study you did was a study on the
12 tumorigenicity of smoke condensate; correct?

13 A. Yes, uh-huh.

14 Q. That's a mouse skin painting test; correct?

15 A. Yes.

16 Q. And in doing that experiment, what IBT did was
17 take the smoke from a control cigarette and the smoke
18 from a G13 expanded cigarette, took the particulate
19 phase of that; that is, what the smoker would
20 normally get in the lung, and paint that on the mouse
21 skin; correct?

22 MR. CRIST: Objection to the form of the
23 question, assumes facts not in evidence.

24 A. If the -- the experiment was conducted in the
25 same manner as, as far as I can tell, the way Wynder

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1 conducted, take smoke.

2 Q. Okay. In any event -- but -- but what I -- how
3 I stated it's basically correct, isn't it?

4 MR. CRIST: Same objections.

5 A. Skin painting -- skin painting testing.

6 Q. Right. You take the smoke from a cigarette and
7 reduce it to the particulate phase; correct?

8 A. Yeah, uh-huh.

9 Q. And again that particulate phase is the stuff
10 that the smoker would inhale into the lung; correct?

11 MR. CRIST: Objection.

12 A. Not the same, no.

13 Q. Well it doesn't have the gas phase; right?

14 A. True, but the way the smoke is prepared takes a
15 lot of handling, so it's quite different from smoke
16 as delivered to the smoker.

17 Q. But you're trying to approximate the smoke
18 that's delivered to the smoker as -- as close as
19 possible; correct?

20 MR. CRIST: Objection to the form.

21 A. It's not even a close approximation.

22 Q. You're trying to approximate it as closely as
23 possible, though; right?

24 MR. CRIST: Objection to the form, asked
25 and answered.

1 A. It is not even close approximation.

2 Q. If it's not a close approximation, why do it?

3 A. Well this is the way that it was being done at
4 the time by people like Wynder, and even in the
5 Tobacco Working Group we did exactly that way.

6 Q. It was an accepted method; correct?

7 A. It was an accepted method for testing smoke on
8 the skins of mice.

9 Q. Okay. And the purpose you're testing --

10 The reason you're testing smoke on the skins of
11 mice is to see whether it's going to have any adverse
12 effect; correct?

13 MR. CRIST: Objection to the form of the
14 question.

15 A. Well, are you asking about this particular
16 test?

17 Q. Yes.

18 A. Well the purpose of this test was to obtain
19 results, compare regular cigarette smoke unpuffed,
20 smoke from puffed cigarette, compare it, and then we
21 were -- we had a patented process, so we were
22 approaching other people to see if they would license
23 the process to show them that there was no
24 difference.

25 Q. You're using the results of the skin painting

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1 test to sell your product; correct?

2 MR. CRIST: Objection to the form.

3 A. That was a skin painting result to assure a
4 potential patentee, give him the results of the
5 test.

6 Q. When you painted the smoke condensate on the
7 skins of these mice for the control smoke, the
8 regular tobacco smoke, 37.5 percent of the test
9 animals developed tumors; correct?

10 MR. CRIST: Objection to the form.

11 A. But this was what you call a forced test.

12 Q. They developed tumors; correct?

13 A. It's what it says in here.

14 Q. Right.

15 A. Uh-huh.

16 Q. Did you ever report that publicly, that by
17 painting tobacco smoke from a regular cigarette on a
18 mouse, that you were able to induce tumors in 37.5
19 percent of the mice?

20 MR. CRIST: Objection.

21 A. This -- this report is -- was given to other
22 people. It was in the public domain.

23 Q. It was given to other tobacco manufacturers;
24 correct?

25 A. Yeah, uh-huh.

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1 Q. The results of these were never published in a
2 publicly available journal, were they?

3 A. Insofar as I know.

4 Q. They were not?

5 A. As far as I know.

6 Q. Okay. Your answer is they were not? I just
7 want the record --

8 MR. CRIST: Objection. His answer was what
9 his answer was.

10 Q. It's your testimony that these results were not
11 published; correct?

12 MR. CRIST: Objection.

13 A. Insofar as I know.

14 Q. There was nothing preventing R.J. Reynolds from
15 publishing those results; correct?

16 MR. CRIST: Objection to the form.

17 A. There was nothing preventing publication insofar
18 as I know.

19 Q. So RJR certainly could have published these
20 results and let the whole public know that when they
21 painted smoke from a control cigarette on a mouse --
22 on the skin of a mouse, 37.5 percent of those mice
23 developed tumors?

24 MR. CRIST: Same objections.

25 A. When you publish something, you need to publish

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1 something that would be, say, a contribution to the
2 literature. I -- I didn't -- I would not have
3 recommended it be published.

4 Q. Well, and you didn't recommend that it was
5 published. That's not my question. My question is:
6 Should it have been published by R.J. Reynolds?

7 MR. CRIST: Object to the form of the
8 question, move to strike the introductory comments.

9 A. At this point I don't have an opinion on the
10 matter.

11 Q. One of the reasons that this information wasn't
12 published is because of the legal implications of the
13 results of your work; correct?

14 MR. CRIST: Object to the form.

15 A. I don't know that to be true.

16 Q. Why don't you look under "RECOMMENDATIONS,"
17 number three. It says --

18 MR. CRIST: I don't think he knows where
19 you are, Dan.

20 Q. First page. Go to the first page of the
21 document. Do you see under "RECOMMENDATIONS" there,
22 number three?

23 A. Yes.

24 Q. It says, quote, "Because of the legal
25 implications of the results," parenthetical, "(acute

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1 toxicity study: tobacco smoke produced in air killed
2 the test animals; skin-painting study: control
3 tobacco smoke gave tumors in 37.5 percent of the test
4 animals), postpone submission of these two
5 manuscripts for publication until the NCI
6 skin-painting study"; correct?

7 MR. CRIST: Objection to form.

8 A. I read that. That's what it says.

9 Q. Okay. So in other words, what Dr. Rodgman is
10 saying is because of the legal implications of the
11 fact that your mouse skin painting tests produced
12 tumors, you shouldn't publish this; right?

13 MR. CRIST: Object to the form, improper
14 opinion, calls for improper opinion.

15 A. Well the fact of the matter is this -- the fact
16 of the matter is this, that this process was
17 submitted to NCI, it was tested, and the results were
18 not adverse.

19 Q. The fact of the matter is you had your results
20 before NCI had theirs; correct?

21 A. Let's see now. '73, I think the results of
22 NCI -- '73. Okay. Well we did rely then in this
23 case on the NCI results.

24 Q. Well in selling your product, you relied on your
25 own results. In going out and marketing your product

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1 to each of the other tobacco manufacturers, you
2 freely relied on your IBT results; correct?

3 MR. CRIST: Object to the form.

4 A. Well the purpose of those -- that experiment was
5 primarily to present the data to potential
6 licensees.

7 Q. Well that's what you made the purpose, sir. The
8 fact of the matter is: Don't you think the smoking
9 public would want to know that your control smoke
10 when applied to the skin of mice produced tumors in
11 37.5 percent of the animals?

12 MR. CRIST: Object to the form of the
13 question. I also object, it calls for speculation.

14 A. Well I repeat the purpose was for purpose of the
15 licensing of the patent.

16 Q. At the time this work was completed, it was
17 unique; correct? The NCI study had not yet been
18 done?

19 MR. CRIST: Objection to the form of the
20 question, assumes facts not in evidence.

21 A. From a purely scientific research standpoint, I
22 feel -- I personally feel there was no obligation to
23 publish.

24 Q. RJR isn't in the business of conducting
25 science. It's in the business of selling cigarettes;

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1 correct?

2 MR. CRIST: Object to the form.

3 A. In the business of selling cigarettes, true,
4 yes.

5 Q. That's right.

6 A. Uh-huh.

7 Q. And in 1954 RJR didn't hesitate to take out
8 full-page ads throughout the country telling
9 everybody that they didn't think there were any
10 problems with their products; correct?

11 MR. CRIST: Objection to the form of the
12 question. This is argumentative.

13 A. This does not indicate there's a problem with
14 the product.

15 Q. You --

16 You think that when you paint cigarette smoke on
17 a mouse and the mouse produces 37 -- 37.5 percent of
18 those mice develop tumors, that that doesn't indicate
19 there's any problem with your product?

20 MR. CRIST: Objection to the form.

21 A. This is an acute test.

22 Q. Which would mean it would only get worse
23 long-term; correct?

24 MR. CRIST: Objection to the form.

25 A. Not necessarily.

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1 Q. Did you conduct this test long-term?

2 A. I mean, under the conditions here, we're talking
3 about here, I feel certain in my mind that we acted
4 responsibly, and as far as I'm concerned, there was
5 no need to publish this information, period.

6 Q. So it's your testimony that RJR acted
7 responsibly by suppressing this information and not
8 allowing --

9 MR. CRIST: Objection to the form of the
10 question.

11 MR. AVRAM: That's not what he testified.

12 MR. CRIST: I'm sorry.

13 MR. O'FALLON: Strike that.

14 A. It was not suppressing it.

15 Q. Wait. Let's -- since counsel's going to talk
16 over my question, I'm going to repeat it.

17 MR. CRIST: I apologize. I thought you
18 were done.

19 A. The information --

20 Q. Wait, let me answer my question -- ask my
21 question.

22 MR. CRIST: Freudian slip.

23 Q. As far as you're concerned, it was perfectly
24 responsible for RJR to withhold information showing
25 that its tobacco smoke from its cigarettes produced

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1 tumors in 37.5 percent of the mice?

2 MR. CRIST: Object to the form of the
3 question. It's argumentative.

4 A. The information was not suppressed.

5 Q. Did you disclose it to the public?

6 MR. CRIST: Objection, argumentative.

7 A. We gave it to people in the public. We gave it
8 to the tobacco companies.

9 Q. You only gave it to the tobacco companies;
10 correct?

11 A. Yeah, uh-huh.

12 Q. Did you give it to the smoking public?

13 MR. CRIST: Objection, asked and answered,
14 argumentative.

15 A. The information was not suppressed.

16 Q. It wasn't placed in a journal, was it?

17 MR. CRIST: Same objections.

18 A. I say it was not suppressed.

19 Q. It wasn't placed in a journal, was it?

20 MR. CRIST: Same objections.

21 A. But it's -- it was not suppressed.

22 Q. You're not claiming that this IBT study
23 demonstrated that your cigarette smoke was safe, are
24 you?

25 MR. CRIST: Objection, irrelevant.

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1 Q. Do you believe safety is irrelevant in this
2 litigation, sir?

3 A. There is --

4 MR. CRIST: I object. That's
5 inappropriate. It's argumentative.

6 A. There is a risk in smoking.

7 Q. Are you claiming that this IBT study showed that
8 smoking your cigarettes was safe?

9 MR. CRIST: Objection. What Dr. Senkus's
10 claim is is irrelevant.

11 MR. O'FALLON: Sir, if you want to testify,
12 I'll put you under oath, we can ask you questions.

13 A. Okay. Ask the question again, please.

14 Q. Are you claiming that this IBT study showed that
15 smoking your cigarettes was safe?

16 MR. CRIST: Same objections.

17 A. That was not the intent of this test, to show
18 whether it was safe or not. It was simply to make a
19 comparison between ordinary cigarettes and puffed
20 cigarettes. That's all we were doing.

21 Q. And what this study showed is that puffed
22 cigarettes were no more or less deadly than your
23 standard cigarette; correct?

24 MR. CRIST: Objection to the form of the
25 question, argumentative.

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1 A. Well I've answered the question.

2 Q. My question is: This study showed that puffed
3 cigarettes were no more or less deadly than your
4 standard cigarette; correct?

5 MR. CRIST: Same objections.

6 A. It showed that -- it showed that they're the
7 same. There were no -- there was no what might be
8 regarded as an adverse effect of puffing.

9 Q. Because with puffed tobacco you produced 35
10 percent tumors and with regular tobacco you produced
11 37.5 percent tumors; correct?

12 MR. CRIST: Objection to the form of the
13 question.

14 A. I don't know where you see that.

15 Q. Why don't you look on page 658.

16 A. 658.

17 Q. Number three.

18 A. Uh-huh.

19 Q. First sentence, "The expanded tobacco smoke
20 group gave a tumor incidence slightly less (35
21 percent versus 37.5 percent) than that in the control
22 group (no statistically significant difference)";
23 correct?

24 A. Uh-huh, yeah.

25 Q. So the expanded tobacco was no more or less

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1 deadly than your regular --

2 MR. CRIST: Object to the form of the
3 question.

4 Q. -- tobacco?

5 A. I don't see where you get this deadly stuff.

6 Q. Because again you're denying that cigarette
7 smoke is deadly?

8 MR. CRIST: Objection.

9 Q. Well let me ask you this: Is producing tumors
10 in mouse considered good?

11 MR. CRIST: Object to the form of the
12 question.

13 A. Well producing tumors on the skins of mice in a
14 certain procedure like Wynder developed, that's just
15 the way of testing smoke prepared in that particular
16 manner.

17 Q. Wynder didn't do this test, sir. You did.

18 A. No, no, but we were more or less following his
19 procedure, using his procedure.

20 Q. And is it your interpretation that producing
21 tumors in 37.5 percent of the animals indicates that
22 the cigarette smoke is safe?

23 MR. CRIST: Objection, asked and answered.

24 A. I didn't say that. I didn't say that.

25 Q. Tumors can certainly be deadly, can't they,

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1 sir?

2 MR. CRIST: Objection to the form of the
3 question. It's getting argumentative.

4 A. Tumors can be deadly, did you say that?

5 Q. Yes.

6 A. Well, to begin with, you're talking to a chemist
7 and -- and I would not qualify myself to make any
8 comment on that particular statement.

9 Q. Well that's interesting because this is a memo
10 from a chemist, Dr. Rodgman, to a chemist, yourself.
11 There's nothing but chemists that are looking at this
12 data for R.J. Reynolds; correct?

13 MR. CRIST: Object to the form of the
14 question.

15 A. Well I just repeat for the tenth time the
16 purpose of this test was to provide potential
17 patentees that there is no difference between puffed
18 tobacco and unpuffed tobacco.

19 Q. Is it your testimony that you were not qualified
20 to assess the work that R.J. Reynolds contracted with
21 IBT?

22 A. Well this project had a specific objective, as I
23 mentioned, to determine if puffing tobacco has any
24 adverse effect. We showed there was no adverse
25 effect, period.

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1 Q. Move to strike as nonresponsive.

2 Is it your testimony that you were not qualified
3 to assess this work?

4 A. To -- say that again.

5 Q. Is it your testimony that you were not qualified
6 to assess the results of this work?

7 A. What the results was, there was no difference.
8 That was the aim and that was the result.

9 Q. And you felt you could assess those results;
10 correct?

11 A. Beg your pardon?

12 Q. You could assess those results? You felt you
13 were qualified enough to assess those results?

14 MR. CRIST: I object to the question as
15 vague.

16 A. I think I answered the question.

17 Q. And again, this work didn't prove in any
18 absolute sense that your cigarettes were safe;
19 correct?

20 MR. CRIST: Objection, asked and answered.

21 A. Well I thought I answered the question.

22 MR. AVRAM: No, he asked another question.

23 Q. And again, this work didn't prove in any
24 absolute sense that your cigarettes were safe;
25 correct?

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1 MR. CRIST: Same objections.

2 A. You talk about safe. We're talking about it is
3 a known fact that smoking has a risk, that it's a
4 risk -- risky exercise.

5 Q. Are you saying it's a known fact that cigarette
6 smoking causes lung cancer?

7 A. I'm not saying that.

8 Q. I didn't think you were.

9 MR. CRIST: Move to strike that gratuitous
10 comment.

11 Q. Doctor, you've written on the subject of
12 nicotine; correct?

13 A. Yes.

14 Q. You've written fairly extensively on that
15 subject?

16 A. You might say that.

17 Q. Okay. That was one of the subjects that you
18 were responsible for with RJR; correct?

19 A. In what sense do you mean that?

20 Q. Well you oversaw the research on nicotine at
21 RJR; correct?

22 A. Whatever work was done, as I was director of
23 research, I was involved in it, yes.

24 Q. And you've written on the subject of nicotine
25 and smoker satisfaction; correct?

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1 A. Yes.

2 Q. Without any question, the decision -- the desire
3 to smoke is based on the effect of nicotine on the
4 body; correct?

5 MR. CRIST: Object to the form.

6 A. The response to nicotine in a smoker is an
7 important factor of smoking.

8 Q. Okay. And you would agree that without any
9 question, the desire to smoke is based on the effect
10 of nicotine on the body?

11 MR. CRIST: Same objection.

12 A. Desire to smoke is related to nicotine, yes.

13 MR. O'FALLON: Let me mark our next
14 document here.

15 (Plaintiffs' Exhibit 1085 was marked
16 for identification.)

17 BY MR. O'FALLON:

18 Q. I've marked as Exhibit 1085 a document Bates
19 stamp numbered 50152 5355 through 5366. Would you
20 look at that document and tell me if you recognize
21 it.

22 A. Yes, I do.

23 Q. And what is this document?

24 A. Discussing smoking satisfaction.

25 Q. Okay. This is a document written by you;

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1 correct?

2 A. Yes.

3 Q. It was a talk delivered to RJR Tobacco Company
4 management; correct?

5 A. Yes.

6 MR. CRIST: Objection. I think
7 unintentionally you didn't get the correct title on
8 that, Dan.

9 MR. O'FALLON: It's entitled "SMOKING
10 SATISFACTION"; correct?

11 MR. CRIST: Yeah, but you said "RJR Tobacco
12 Company." I think it says "RJR Tobacco
13 International."

14 MR. O'FALLON: Well then you better relook
15 at it. "(Talk delivered to RJR Tobacco Company
16 management" --

17 MR. CRIST: Oh, I see, I apologize.

18 MR. O'FALLON: -- "June 23rd, 1974" --

19 MR. CRIST: I apologize.

20 MR. O'FALLON: -- "and RJR Tobacco
21 International management August 4th, 1976 - by Murray
22 Senkus)"; correct?

23 MR. CRIST: Yeah. Part of that line's cut
24 off, and I apologize.

25 BY MR. O'FALLON:

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1 Q. Correct?

2 A. Yes, uh-huh.

3 Q. So this is basically the text of a speech that
4 you gave to top management at RJR; correct?

5 A. Yes.

6 Q. Let's start by looking at page 358 of this
7 document. Are you there?

8 A. Yes.

9 Q. You state after the indentation, quote, "Without
10 any question, the desire to smoke is based on the
11 effect of nicotine on the body"; correct?

12 A. Yes.

13 Q. Go back to page 356. On that page you state "In
14 smoking the effect produced on the human body is
15 ascribable mainly to nicotine"; correct?

16 A. Yes.

17 Q. You then go on to describe --

18 MR. CRIST: I -- I object to that on the
19 basis that I would again invoke the rule of
20 completeness.

21 MR. O'FALLON: Look, if you want to read in
22 the whole document when it's your turn, you're more
23 than entitled to do that.

24 MR. CRIST: I'm just imposing the
25 objection.

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- 1 Q. You then go on to explain how nicotine's
2 absorbed; correct?
- 3 A. How nicotine is --
- 4 Q. Absorbed.
- 5 A. Yes, uh-huh.
- 6 Q. Okay. You state, quote, "When one inhales - one
7 gets into the lungs - and then into the blood - a
8 certain amount of nicotine."
- 9 A. Yes.
- 10 Q. "For example, a person smoking a non-filtered
11 cigarette, taking one puff a minute and inhaling - 10
12 puffs - shows" a "pattern," and then you set forth
13 the pattern; correct?
- 14 A. Yes.
- 15 Q. Let's go to the next page, Bates 5357. Towards
16 the middle of the page you state, quote, "The
17 nicotine in the blood acts upon the central nervous
18 system and produces in the average smoker a sensation
19 one could describe as both stimulating and relaxing";
20 correct?
- 21 A. Yes.
- 22 Q. Nicotine's basically a drug, isn't it, sir?
- 23 A. Huh?
- 24 Q. It's a drug, isn't it, sir?
- 25 MR. CRIST: Object to the form.

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1 A. Some people refer to it as -- as a drug, yes.

2 Q. Do you refer to it as a drug?

3 A. Not in the way it is used in smoking. It does
4 not act like a drug.

5 Q. It's a pharmacologically active substance;
6 correct?

7 A. Yes, but in the amount that you receive in the
8 body, it doesn't act like a drug.

9 Q. Well it produces stimulation; correct?

10 A. Yes.

11 Q. Other drugs produce stimulation; correct?

12 A. I'd say this is very mild stimulation.

13 Q. Well, then so what you're saying is it's a mild
14 drug?

15 MR. CRIST: Object to the form of the
16 question. You're arguing with the witness.

17 A. No, I say very specifically I do not regard
18 it -- in smoking, I would not regard it as a drug.

19 Q. So --

20 A. It is not used as a drug in smoking.

21 MR. CRIST: Is something happening?

22 MS. FORBES: It might be construction up
23 there.

24 MR. CRIST: Oh.

25 Q. Each person basically smokes to get a certain

1 desired amount of nicotine; right?

2 A. Are you reading from the report?

3 Q. I'm asking you.

4 A. Huh?

5 Q. Each person smokes to get a certain desired

6 dosage of nicotine; correct?

7 MR. CRIST: Object to the form.

8 A. Well when a person smokes, he has developed a

9 certain pattern and gets a certain amount of nicotine
10 in the blood.

11 Q. And that creates a certain effect on his body,
12 correct, this state of stimulation or relaxation?

13 A. Yeah, uh-huh.

14 Q. And half an hour, when the nicotine's basically
15 gone from the blood, the smoker gets another craving
16 to have again more nicotine; correct?

17 MR. CRIST: Objection to the form of the
18 question.

19 A. You say he relights a cigarette?

20 Q. I'm saying he gets a craving for the nicotine
21 once it's gone back out of his system after smoking
22 about a half hour after smoking. Correct?

23 MR. CRIST: Same objection.

24 A. Well he lights another cigarette.

25 Q. In order to again get that same boost and that

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1 same nicotine level; correct?

2 MR. CRIST: Same objection.

3 A. Well whatever reason that he feels like he
4 should light another cigarette.

5 Q. Well that is the reason? It's a physiological
6 reason, isn't it, sir?

7 A. Well, I'm not a physiologist, so I can't say one
8 way or another.

9 Q. It's a physio --

10 It's a physiological craving for nicotine;
11 correct?

12 A. I'm not a physiologist.

13 Q. Certainly you worked with or had access to
14 physiologists when you were at R.J. Reynolds;
15 correct?

16 MR. CRIST: Objection. You're arguing --
17 arguing.

18 A. No, no.

19 Q. You didn't?

20 A. I mean, this thing is written purely on my own
21 interpretation.

22 Q. As the head of research, correct, for the upper
23 management of your company?

24 A. Uh-huh.

25 Q. Certainly if you're going to be accurate in any

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1 document, you're going to be accurate in a document
2 you're submitting to upper management; correct?

3 A. Well it says what it says here.

4 Q. And if you didn't think you were qualified to
5 talk about nicotine, then you certainly wouldn't be
6 out making a speech concerning nicotine to upper
7 management now, would you?

8 MR. CRIST: Object to the form of the
9 question.

10 A. Was there a question?

11 Q. Yeah. My question is: If you didn't think that
12 you were competent to talk about nicotine in this
13 document, you certainly wouldn't have made this
14 presentation to the management of RJR; correct?

15 MR. CRIST: Same objection.

16 A. Well this report is what -- says what it says.

17 Q. But my question is: You were qualified, you
18 believed at the time, to make this report; correct?

19 A. I was giving them information as I saw it for
20 their consideration.

21 Q. You then go on to say that "It can be assumed
22 that the amount of nicotine that is required to get
23 to this desired effect varies from person to person";
24 correct?

25 A. Yes.

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1 Q. And again the effect you're talking about is
2 this effect of stimulation or relaxation; correct?

3 A. Uh-huh.

4 THE REPORTER: Your answer?

5 THE WITNESS: Huh?

6 THE REPORTER: What was your answer?

7 Q. You have to answer audibly. You have to say
8 "yes" or "no."

9 A. Yes, yes, uh-huh.

10 Q. Okay.

11 MR. CRIST: What was -- what was the
12 answer? Why don't we -- would you mind asking it
13 again, Dan?

14 Q. You then go on to say that "It can be assumed
15 that the amount of nicotine that is required to get"
16 to "this desired effect varies from person to
17 person"; correct?

18 A. Yes.

19 Q. And again the effect you're talking about is
20 this effect of stimulation or relaxation; correct?

21 A. Yes.

22 Q. Okay. There are ways for the smoker to increase
23 or decrease the nicotine delivery himself; correct?

24 A. Yeah.

25 Q. And that's what you talk about a little here at

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1 the bottom of page three; correct?

2 A. Yes.

3 Q. Basically the smoker can regulate his nicotine
4 intake by the way in which he smokes a cigarette;
5 correct?

6 MR. CRIST: Object to the form.

7 A. Yes.

8 Q. This is known as compensation; correct?

9 MR. CRIST: Object to the form.

10 A. I wouldn't regard it that way.

11 Q. Have you heard of the term "compensation"?

12 A. Yes.

13 Q. And you understand that that's a known
14 phenomenon, that people regulate the way they smoke
15 in order to obtain a certain set amount of nicotine?

16 MR. CRIST: Objection to the form.

17 A. If that's the way you define it.

18 Q. Is that how you define it?

19 A. Well I -- I didn't have this in mind when I
20 wrote this, I don't think.

21 Q. If a smoker increases their nicotine delivery,
22 they'll also be increasing their tar delivery;
23 correct?

24 MR. CRIST: Objection.

25 A. Where do you see that?

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1 Q. It's --

2 I'm just asking you the question. That stands
3 to reason, doesn't it?

4 A. If a smoker --

5 MR. CRIST: Object to the form.

6 Q. For any given cigarette, if you increase the
7 amount of nicotine you're taking in by taking larger
8 puffs or by taking longer puffs or by puffing more
9 frequently, by definition, you're also going to
10 increase the amount of tar that goes along with that
11 nicotine; correct?

12 MR. CRIST: I object to the form.

13 A. If nicotine is an intimate part of the tar.

14 Q. Well nicotine is an intimate part of the tar, is
15 it not?

16 MR. CRIST: Well excuse me, I think you cut
17 him off.

18 Q. Did I cut you off?

19 A. I'm saying if nicotine is an in -- intimate part
20 of the tar, you would get more tar.

21 Q. Okay. And nicotine is an intimate part of the
22 tar, is it not?

23 A. Yeah, uh-huh.

24 Q. There's a certain tar-to-nicotine ratio;
25 correct?

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1 A. Yes.

2 Q. As a matter of fact, haven't executives of the
3 major manufacturers went before Congress and
4 testified that that's a consistent number, that
5 there's always the same amount of tar and nicotine?

6 MR. CRIST: Objection, calls for hearsay.
7 It also assumes facts not in evidence.

8 A. You said something about Congress or people
9 reporting to Congress?

10 Q. Tar-to-nicotine ratio, --

11 A. Yeah.

12 Q. -- is there just one tar-to-nicotine ratio?

13 A. No, there are different ratios.

14 Q. And you can manipulate that as a cigarette
15 manufacturer; correct?

16 MR. CRIST: Object to the form of the
17 question.

18 A. As far as tar and nicotine ratio is concerned,
19 it is a matter of tobacco which is being used by any
20 one company that is available at the time.

21 Q. It's also --

22 MR. CRIST: Excuse me, Dan, I'd just like
23 to request a break.

24 MR. O'FALLON: Can I just get through this
25 line of questioning here?

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1 MR. CRIST: I don't know how much longer
2 it's going to take. That's --

3 MR. O'FALLON: Well you've caught me right
4 in the middle of it, so let me go to a point. Okay?

5 MR. CRIST: Let me -- let me just say I'm
6 getting concerned. I think that the witness may be
7 getting tired.

8 MR. O'FALLON: Well if the witness is
9 getting tired, he can say so, sir. Let me ask my
10 question. I don't appreciate it when you interrupt
11 my questioning right smack dab in the middle. Okay?

12 MR. CRIST: I waited until after the answer
13 was given to try to request the break. I didn't try
14 to interrupt a question that was pending.

15 BY MR. O'FALLON:

16 Q. As far as the tar-to-nicotine ratio is
17 concerned, the company can manipulate that by putting
18 in certain additives; correct?

19 MR. CRIST: Object to the form.

20 A. We have never -- Reynolds has never done that.

21 Q. So you're telling me that Reynolds has always
22 produced cigarettes with the same tar-to-nicotine
23 ratio?

24 A. Not the same.

25 MR. CRIST: Object to the form.

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1 A. But it depended on the crop available in storage
2 at the time.

3 Q. So you've never added ammonia to your tobacco in
4 order to affect the tar-to-nicotine ratio?

5 A. In production I can assure you we didn't.

6 Q. It's your testimony that you never added ammonia
7 to your tobacco?

8 MR. CRIST: Objection to the form.

9 A. We have -- may have on an experimental basis,
10 but insofar as I know in my period at Reynolds, we
11 did not add ammonia to the tobacco, as far as I
12 know.

13 I think you have to explain here, we want to be
14 sure that we're clear what relation ammonia would
15 have with T/N ratio.

16 Q. Is it your testimony it has no relationship?

17 A. I don't believe it has.

18 Q. What's the standard tar/nicotine ratio of most
19 RJR products?

20 A. Well the tar/nicotine ratio -- tar/nicotine,
21 tar/nicotine, so it would be like anywhere from --
22 depending on the crop year over the years, it would
23 vary from 16 to 1 to maybe 10 to 1, something like
24 that.

25 Q. And R.J. Reynolds controls the tar/nicotine

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1 ratio of each of its cigarettes; correct?

2 MR. CRIST: Object to the form of the
3 question.

4 A. No, no. No, actually it depends entirely on the
5 crop year.

6 Q. Well Dr. Rodgman said that you had a
7 denicotinization process that you used to control
8 nicotine delivery over time. Is that not true
9 testimony?

10 MR. CRIST: Object to the form of the
11 question.

12 A. Well if, for example -- I'm not -- I'm not -- I
13 wasn't privy to the manufacturing, whether they did
14 or did not, but -- so what's -- what's the question?

15 Q. I asked you whether Dr. Rodgman's testimony that
16 R.J. Reynolds used a denicotinization process to
17 control nicotine delivery was inaccurate.

18 A. Well I would not --

19 MR. CRIST: Object to the form of the
20 question. I ask that you put the transcript in front
21 of the witness.

22 A. I would not dispute Dr. Rodgman's testimony, but
23 I'll say this, that for example, if a certain crop
24 year in Tennessee there was a drought and the tobacco
25 were exceedingly high in nicotine, it may be

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1 desirable to reduce that nicotine.

2 Q. In the G7 process, RJR ultimately controls the
3 amount of nicotine that will be in the G7
4 reconstituted sheet; correct?

5 MR. CRIST: Object to the form.

6 A. The amount of nicotine in reconstituted sheet?

7 Q. Yes.

8 A. Uh-huh. So what's the question?

9 Q. I said they control it. Correct?

10 MR. CRIST: Same objection.

11 A. Well they -- they aim at a certain nicotine
12 by -- G7 is made not only just from -- from stems,
13 but it also incorporates in it tobacco vines, and so
14 that by using proper vines, you can adjust the
15 nicotine in a G7.

16 Q. And the whole process is one where you basically
17 initially wash out all the nicotine and other tobacco
18 extracts from the sheet, reconstitute the sheet into
19 a paper-like product and then spray the extract back
20 on the sheet; correct?

21 A. Yes.

22 Q. And during that process, you can also add other
23 things, such as ammonia; correct?

24 A. What would be the -- well okay, you might add
25 ammonia, yes.

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1 Q. And RJR did add ammonia, didn't they, to the
2 reconstituted sheet?

3 A. Uh-huh, but please be sure you put this in the
4 proper perspective, this addition of ammonia. I
5 don't know that this is -- I think this business of
6 adding ammonia is misrepresented, the purpose of it.

7 Q. The amount of free nicotine in the smoke affects
8 the taste; correct?

9 A. The amount of free nicotine in the smoke does
10 affect the taste, yes.

11 Q. Initially there was relatively little nicotine
12 transferred to the smokers' taste buds and into the
13 bodily fluids in the mouth; correct?

14 MR. CRIST: Objection to the form.

15 A. Let's see. Initially there's relatively little
16 nicotine transferred in the mouth?

17 Q. Right.

18 A. Yes.

19 Q. However, to enhance that taste, that transfer in
20 the mouth, one must raise the pH of smoke; correct?

21 A. Now please understand -- and -- and this -- I
22 want to make this point very clear -- that as far as
23 taste is concerned, only a trace of nicotine is
24 required to give you the desired taste.

25 Q. Okay. Well let's look at page 359 and what you

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1 wrote about the specific question I just asked.

2 A. 359.

3 Q. Let's go down to the second full paragraph, the
4 third sentence in the second full paragraph.

5 A. Uh-huh.

6 Q. Do you see where I'm at?

7 A. Yes.

8 MR. CRIST: I'm sorry, which -- which
9 paragraph, Dan? Is it the last paragraph on --

10 MR. O'FALLON: Yes, the second full
11 paragraph.

12 MR. CRIST: Okay, the last paragraph.
13 Okay. Thank you.

14 Q. You write, quote, "To enhance this taste, one
15 must raise the pH of smoke."

16 A. Yes.

17 Q. "So simply by raising pH, say from 6.0 to 6.5
18 you raise the level of nicotine that is transferred
19 to the taste buds and" bodily "fluid in the mouth to
20 the same level as with the higher tar" cigarettes;
21 correct?

22 A. What I want to explain is this --

23 Q. First of all, is that what you wrote?

24 A. Let me read that. "So simply by raising pH, say
25 from 6.0 to 6.5 you raise the level of nicotine that

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1 is transferred to the taste buds and body fluid in
2 the mouth to the same level as with the higher tar
3 cigarette."

4 First of all, I want to make it clear that it
5 only takes a trace of free nicotine in the smoke --
6 and it's mostly in the gas phase -- to give you the
7 desired taste. Now the higher-tar cigarette may
8 already have enough free nicotine to give you the
9 desired taste, but here we're talking about taste
10 only in the sentence. We're talking about taste
11 only, and it only takes a trace of nicotine in the
12 gas phase to give you the desired taste.

13 Q. And yet that -- that small amount, that taste,
14 can be very important to how the smoker ultimately
15 perceives the cigarette; correct?

16 A. It's a matter of taste, yes. I mean, it's --

17 Q. It also has an effect on the kick the smoker
18 receives; correct?

19 A. No, not the kick. No, we're talking about two
20 different things. We're talking about taste and kick
21 are two different things. We're talking about two
22 different things.

23 Q. You would agree that by adjusting the pH, you do
24 adjust the amount of free nicotine in smoke;
25 correct?

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1 A. We're talking about a trace amount.

2 Q. My question is: By adjusting pH, you adjust the
3 amount of free nicotine in the smoke; correct?

4 A. You only need a trace to get the desired taste.

5 Q. Move to strike. Answer my question.

6 By adjusting the pH, do you adjust the amount of
7 free nicotine in the smoke?

8 A. Well the way you asked that question, as if
9 you're putting a lot of nicotine in the -- in the --
10 in the -- in the gas phase.

11 Q. I didn't say anything, sir.

12 MR. CRIST: Don't argue with him, please.

13 Q. Just answer my question.

14 A. Okay. Ask the question again.

15 Q. For the third time, by adjusting pH, you adjust
16 the amount of free nicotine in the smoke; correct?

17 MR. CRIST: Object to the form of the
18 question, move to strike the gratuitous
19 introduction.

20 A. Within 6.0 to 6.5, the actual amount of free
21 nicotine you put in the smoke is extremely small,
22 just a trace amount. The taste buds are very
23 sensitive to the amount of nicotine so that we're
24 talking about taste only here, and you don't need
25 much nicotine, more nicotine, to affect the taste.

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1 Q. If you increase the pH of smoke, you increase
2 the amount of free nicotine in that smoke; correct?
3 A. Well how much do you increase the pH?
4 Q. Any increase in pH ultimately will increase the
5 free nicotine in the smoke; correct?
6 A. When you -- when you're talking about cigarettes
7 and if you even go up to 6.5, even at 6.5 you only
8 have a trace of nic -- free nicotine in the smoke.
9 Q. My question is: By increasing the pH, you still
10 increase that amount of free nicotine; correct?
11 A. But very small. With --
12 Q. What's the percent of free nicotine in smoke at
13 6.5 pH?
14 A. Oh, percent?
15 Q. Yes.
16 A. My opinion as a physical chemist is that it
17 would be like a hundredth of a percent, very, very,
18 very little.
19 (Discussion off the stenographic record.)
20 MR. O'FALLON: Why don't we take a break.
21 THE REPORTER: Off the record, please.
22 (Recess taken.)
23 BY MR. O'FALLON:
24 Q. Dr. Senkus, I'm going to hand you a document
25 that's been previously marked as Plaintiffs' Exhibit

1 1059. It's Bates numbered 50060 6138 through 6153.

2 Have you seen that document previously?

3 A. Yes.

4 Q. Okay. Now about the time of this document,

5 which is dated May 10th of 1973, --

6 MR. CRIST: I'm sorry.

7 Q. -- RJR undertook some rather significant work

8 tracking whether or not the pH and free nicotine of

9 various cigarette brands correlated with sales

10 trends; correct?

11 MR. CRIST: Object to the form.

12 A. Yes.

13 Q. And that's exactly what this document is;

14 correct? It's entitled the "HISTORICAL REVIEW OF

15 SMOKE pH DATA AND SALES TRENDS FOR COMPETITIVE BRAND

16 FILTER CIGARETTES"; correct?

17 A. Yes.

18 Q. I'd like to come back to an issue that you and I

19 ended up with concerning the percent of free nicotine

20 in cigarette smoke. It was my understanding that you

21 said that the percent of nicotine -- free nicotine in

22 cigarette smoke was extraordinarily low, less than 1

23 percent; correct?

24 A. Much less.

25 Q. Okay. Much, much less; right?

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- 1 A. Yes, very much less.
- 2 Q. Let's look on page 6140. Do you have that page
- 3 in front of you, sir?
- 4 A. Yes, uh-huh.
- 5 Q. Do you see the section entitled "Free or Unbound
- 6 Nicotine"?
- 7 A. Uh-huh.
- 8 Q. That states, quote, "As the smoke pH is
- 9 increased the amount of free nicotine in the smoke
- 10 increases"; correct?
- 11 A. Yes.
- 12 Q. It states "For example, at a smoke pH of 6.0,
- 13 about 1.5 percent of the nicotine in the smoke is in
- 14 the free, or unbound, form"; correct?
- 15 A. Uh-huh.
- 16 MR. CRIST: Object to the form.
- 17 Q. That's a great deal more than you thought was in
- 18 the smoke; correct?
- 19 MR. CRIST: Object to the form.
- 20 A. But that's -- I don't think there's any -- this
- 21 man is -- I don't know what -- where he got this
- 22 information.
- 23 Q. Well he's one of your employees in the chemical
- 24 research division; correct?
- 25 A. Well true. I mean, yeah, that --

1 MR. CRIST: Object to the form.

2 A. That's his opinion.

3 Q. That's the opinion of an RJR employee who's been
4 asked to look at this precise issue; correct?

5 MR. CRIST: Object to the form.

6 Q. Correct, sir?

7 A. The thing -- the thing about nicotine is it's a
8 very unusual chemical substance and it's a base and a
9 pH is -- say at pH 6 it's mostly in bound form, so
10 I -- I --

11 Q. And -- and --

12 A. See, when a person writes a report, you don't
13 dispute everything he says. I'm giving you my
14 opinion as a physical chemist who's worked with bases
15 for many years, even at Commercial Solvents, talking
16 about base strength, and so my opinion is, my
17 personal opinion is, that it takes very little
18 nicotine to give the desired taste, and so as you
19 increase the amount of free nicotine, the taste
20 becomes more apparent and you get to a point where
21 you have too much free nicotine, it's intolerable.

22 Q. Sir, this is an official RJR report, is it not?

23 MR. CRIST: Object to the form, being
24 argumentative.

25 A. Yeah, it's an official report.

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- 1 Q. It was copied to you, correct, if you look on --
- 2 A. Yes.
- 3 Q. -- page 6142?
- 4 A. Please remember I'm giving you now my personal
- 5 opinion.
- 6 Q. Sir, this report was copied to you; correct?
- 7 A. Yes, uh-huh.
- 8 Q. It was approved by D. H. Piehl; correct? Why
- 9 don't you look at page 6142.
- 10 A. Yeah, uh-huh. Uh-huh. Yes, uh-huh.
- 11 Q. It was approved by D. H. Piehl; correct?
- 12 A. Yeah.
- 13 Q. What's his training? What was his training?
- 14 A. He's a Ph.D. in chemistry, uh-huh.
- 15 Q. Okay. And he was doing bench work at RJR at the
- 16 time; correct?
- 17 A. Yes, uh-huh.
- 18 Q. And it's also accepted by Dr. Alan Rodgman;
- 19 correct?
- 20 A. Yes, uh-huh.
- 21 Q. And although he may not have been doing bench
- 22 work at this time, for many years Dr. Alan Rodgman
- 23 did bench research; correct?
- 24 A. Yes, uh-huh.
- 25 Q. Now did you ever write a memo to Mr. Woods and

1 Ms. Harllee and tell them that you felt they were
2 wrong?

3 A. Now you must remember when a laboratory person
4 has an opinion, you don't correct -- this is his own
5 personal opinion. My personal opinion is as a
6 physical chemist. These people were organic
7 chemists. I'm a physical chemist and I have some
8 idea about how nicotine behaves under certain pH
9 conditions.

10 Q. Is it your testimony that as director of
11 research you allowed what you felt was inaccurate
12 information to remain in R.J. Reynolds' files?

13 A. I'm not considering this as inaccurate. It's a
14 question of my opinion and his opinion, so please
15 don't misunderstand me that -- he may be right. I'm
16 giving you my opinion as I see it right now.

17 Q. Okay. And again let's go back and talk about
18 this R.J. Reynolds employee's opinion.

19 A. Beg your pardon?

20 Q. Let's go back and talk a little more about this
21 employee's conclusions.

22 A. Where is that, please?

23 Q. Let's go back at 6140.

24 A. 6140, okay.

25 MR. CRIST: Page three.

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1 Q. He says at a pH of 6.5, about 5 percent of the
2 nicotine is unbound; correct?

3 A. Yes, uh-huh.

4 Q. And at a pH of 7, approximately 15 percent is
5 free; correct?

6 A. Yes.

7 Q. He states, quote, "Since the unbound nicotine is
8 very much more active physiologically, and much
9 faster acting than the bound nicotine, the smoke at a
10 high pH seems to be strong in nicotine"; correct?

11 A. Yes.

12 Q. "Therefore, the amount of free nicotine in the
13 smoke may be used for at least a partial measure of
14 the physiological strength of the cigarette";
15 correct?

16 A. That's what he says.

17 Q. And again the physiological strength, that's
18 talking about the action of nicotine on the body such
19 as is in the central nervous system as you laid out
20 in your 1976 speech; correct?

21 A. Uh-huh.

22 MR. CRIST: Objection to the form of the
23 question, calls for speculation.

24 Q. True?

25 A. Yeah, uh-huh.

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1 Q. Now when they looked at your competitive
2 products, such as Marlboro and Kool, and looked at
3 the pH levels of those products, they came up with a
4 correlation between the increased sales in Marlboro
5 and Kool and the increases in those cigarettes' pH
6 levels; correct?

7 A. Yeah.

8 Q. And also they found a correlation, an even
9 stronger correlation, between the calculated amount
10 of free nicotine in Marlboro and Kool and the amount
11 of increased sales of Marlboro and Kool; correct?

12 A. Well I mean, this is sheer, you might say,
13 speculation on their part. This --

14 Q. Well is that what your chemists usually do, is
15 engage in sheer speculation in their reports?

16 MR. CRIST: Objection. You're arguing with
17 the witness.

18 A. You're misinterpreting what I'm saying.

19 Q. This is a scientific report, isn't it, sir?

20 A. You know, you have to remember this, that sales
21 of Marlboros were increasing and we made an effort to
22 cope with that problem so that I guess to some extent
23 we seized upon pH as a means to cope with that
24 problem. The fact of the matter is that Philip
25 Morris, whether by accident or by planning, developed

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1 a patented process to produce a cigarette with the
2 desired amount of -- desired pH to produce the right
3 taste.

4 Q. You're talking about its reconstituted hot belt
5 sheet process; correct?

6 A. Well I'm talking about their -- their sheet
7 process, yes.

8 Q. In which they used DAP, diammonium phosphate, --

9 A. Yes.

10 Q. -- to actually bind the sheet; correct?

11 A. Uh-huh, yeah.

12 Q. And one of the effects of DAP, diammonium
13 phosphate, is that it increases the pH; correct?

14 A. Yes.

15 Q. And results in a higher amount of free
16 nicotine?

17 A. Yes.

18 Q. And the way in which that DAP --

19 A. The --

20 Q. Excuse me.

21 MR. CRIST: Wait, wait, let him finish.

22 A. It -- it -- it produces enough more free
23 nicotine, however small, to give you that Marlboro
24 taste.

25 Q. And also the Marlboro kick?

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1 A. I don't think there's such a thing as a kick. I
2 mean, if you compare a Marlboro cigarette with any
3 other cigarette, I wouldn't characterize it as a
4 kick.

5 Q. Well other people in your company did
6 characterize it as kick, didn't they?

7 A. Well they may have. I don't agree with that.

8 Q. Okay. And you didn't have that hot belt sheet
9 process that used diammonium phosphate; correct?

10 A. No, we did not have it, no.

11 Q. Right. Instead what you had to try to do was
12 compensate by adding ammonia in your G7 process?

13 MR. CRIST: Object to the form.

14 A. Whatever little ammonia may have been used to --
15 to, in other words, duplicate what Philip Morris was
16 doing. I'm not aware that we put it in production.

17 Q. Yeah.

18 A. I'm not sure.

19 Q. The problem is, is that adding the ammonia to
20 the top sheet of your reconstituted sheet wasn't
21 nearly as effective, especially in binding the
22 ammonia and allowing the ammonia to be released and
23 thus the free nicotine to be -- be released during
24 smoking, as was the diammonium phosphate process that
25 Philip Morris used; correct?

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1 MR. CRIST: Object to the form of the
2 question.

3 A. Well, I would put it this way, that people at
4 Reynolds in our research department were striving to
5 achieve the Marlboro taste, and one of the things
6 that we might have been doing is -- is somehow using
7 ammonia, but we're talking about very, very small
8 amounts of ammonia.

9 Q. Again let's go back to the summary of this
10 particular report, the histori --

11 A. What page is it on?

12 Q. The first page. Let's go back to the first
13 page.

14 A. Uh-huh, yeah.

15 Q. The "HISTORICAL REVIEW OF SMOKE pH DATA AND
16 SALES TRENDS FOR COMPETITIVE BRAND FILTER
17 CIGARETTES." Under the "SUMMARY" it states that, in
18 the first para -- paragraph, "Relatively" compete --
19 "complete pH data" --

20 A. Are you looking at the summary, you say?

21 MR. CRIST: First page.

22 Q. The very first page, sir.

23 A. Oh, okay, yeah. I was on the wrong page.

24 Q. The summary, are you there now?

25 A. Yes.

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1 Q. Okay. Under the "SUMMARY," the very first
2 paragraph states "Smoke pH data for competitive brand
3 filter cigarettes measured since 1964 were compiled";
4 correct?

5 A. Yes.

6 Q. "Relatively complete pH data were available for
7 the years 1964 to 1972 for WINSTON, SALEM, Marlboro,
8 Kool, Kent and Viceroy cigarettes"; right?

9 A. Yes.

10 Q. "A comparative study of the smoke pH, FTC,"
11 quote, "'tar,'" end quote, "and nicotine for these
12 brands was made"; correct?

13 A. Yes.

14 Q. "The results show that since 1964 the smoke pH
15 for the Marlboro and Kool cigarettes has been
16 steadily increasing, while that for the other brands
17 studied has remained almost constant"; correct?

18 A. Understand that's what it says.

19 Q. "Thus, all the brands have about the same FTC
20 'tar' and nicotine, but the Marlboro and Kool are
21 stronger due to a higher smoke pH"; correct?

22 MR. CRIST: Object to the form of the
23 question, invoke the rule of completeness.

24 A. The sales -- the way he says it, the sales are
25 stronger because of the higher pH. That's what he

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1 says.

2 Q. I'm sorry, that sentence at the last paragraph
3 of -- the last sentence of the first paragraph of the
4 summary says "Thus, all the brands have about the
5 same FTC 'tar' and nicotine, but the Marlboro and
6 Kool are stronger due to a higher smoke pH"; right?

7 A. Yeah, uh-huh.

8 Q. That's what it says?

9 A. I interpret this to mean that the sales are
10 stronger.

11 Q. Well that's not what it says, is it, not in that
12 sentence? It just says the cigarettes are stronger;
13 correct?

14 MR. CRIST: Object to the form.

15 A. Okay, okay. Stronger, yeah.

16 Q. Okay. We're getting to the sales. Sales are in
17 the next paragraph.

18 A. Yeah.

19 Q. It says --

20 MR. CRIST: Object to the form, move to
21 strike.

22 Q. -- "Correlation studies of smoke pH and sales
23 trends between 1964 and 1972 were" then also "made
24 for each brand"; right?

25 A. Yes.

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1 Q. Okay. Then it talks about for Winston the pH
2 values were determined on freezer-stored cigarettes
3 manufactured between 1957 and 1964 and a correlation
4 study made over the period 1957 to 1972; correct?

5 A. Yes.

6 Q. The conclusion is that "The results of these
7 studies show that there is a very strong positive
8 correlation between smoke pH and sales trends over
9 the years studied"; right?

10 A. That's what these -- that's what he concludes
11 based on these studies.

12 Q. Right. So these two scientists have taken --
13 taken a reasoned view and a reasoned examination of
14 this topic; correct?

15 MR. CRIST: Object to the form of the
16 question.

17 A. That's these -- whoever wrote this report came
18 to that conclusion.

19 Q. And certainly if all of you who were copied on
20 the report wanted to dispute these findings, you were
21 certainly free to do so; correct?

22 MR. CRIST: Objection, asked and answered.

23 A. It's also possible that pH has nothing to do
24 with Marlboro sales and Winston sales.

25 Q. Did you write a memo to that effect, sir?

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1 MR. CRIST: Objection, asked and answered.

2 A. It's a conjecture, but my opinion, had nothing
3 to do with pH.

4 Q. Did you ever write that down?

5 MR. CRIST: Objection, asked and answered.

6 A. I did not. This is what I think right now.

7 Q. Is there a memo in the file with your name on it
8 back at this time period where you as head of
9 research state, quote, "I simply do not agree with
10 your findings. This is simply incorrect. This is
11 pure speculation"? Is that memo somewhere in the
12 file?

13 MR. CRIST: Same objections.

14 A. No. At this time we desperately try to cope
15 with the Marlboro sales, and we seized upon pH as
16 probably one way of doing it.

17 Q. And certainly as these people's bosses, if you'd
18 held such an opinion at the time, you were certainly
19 free and could have expressed that in a memo form;
20 correct?

21 MR. CRIST: Objection.

22 A. I don't think it was necessary, because, you
23 know, you can never be absolutely sure that I'm right
24 and they're wrong. You can never be sure when you're
25 in research. You cannot be sure, and I've been in

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1 research a long time and so that there's no way to be
2 sure.

3 Q. You haven't done any bench research since 1951,
4 have you?

5 MR. CRIST: Objection. That's been asked
6 and answered. In this context it's purely
7 argumentative.

8 A. I don't know that it has anything to do with
9 what I've said.

10 Q. They then go on to state that "A high pH smoke
11 is strong due to a high concentration of unbound, or
12 free, nicotine in the smoke"; correct?

13 A. Yes.

14 Q. They then state "Calculations of the unbound
15 nicotine in the smoke of the brands studied were made
16 and used as relative measures of strength for the
17 cigarettes"; correct?

18 A. Yes.

19 Q. "Correlation of those values with sales trends
20 were made and the results showed even stronger
21 positive correlations than were found for the smoke
22 pH-sales trends studies"; correct?

23 A. Yeah, uh-huh.

24 Q. On the next page they conclude "The results of
25 these studies suggest that the strength of a

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1 cigarette, which may be controlled in part by
2 adjustment of smoke pH, is extremely important to the
3 successful performance of the cigarette"; correct?

4 A. Uh-huh.

5 Q. Okay. And again you didn't write any memo that
6 stated that that was an inappropriate conclusion;
7 correct?

8 MR. CRIST: Objection, asked and answered.

9 Q. That that last conclusion was inappropriate.

10 A. It is not customary for a research director to
11 dispute anything that is said in a report. This is
12 just an opinion. It's an opinion of these people.

13 Q. Well certainly if anybody has the ability to
14 dispute that opinion, it would be the head of the
15 re -- research department; correct?

16 A. This is not the way I conducted research. I did
17 not dispute everything in -- you know, it was not
18 my -- would not be customary for a research director
19 to dispute what people wrote.

20 MR. CRIST: Let me, Dan, just designate
21 that portion of the transcript of this deposition
22 that relates to Exhibit 1059 as confidential. The
23 document itself is designated as confidential.

24 Q. Now other people concluded that Philip Morris
25 did not luck into this notion of manipulating pH;

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1 correct?

2 MR. CRIST: Objection, calls for
3 speculation.

4 A. See, now ask that question again.

5 Q. Sure. I said other people at R.J. Reynolds
6 concluded that Philip Morris didn't simply luck into
7 this notion of manipulating the pH of their
8 cigarettes; correct?

9 MR. CRIST: Same objection.

10 A. You're saying did they luck into it or did not
11 luck in -- luck into it?

12 Q. I'm asking whether RJR employees concluded that
13 they in fact did not luck into this manipulation of
14 pH and nicotine.

15 MR. LAYDEN: Object to the form.

16 MR. CRIST: Same objection.

17 A. Well as far as -- as far as that particular
18 question is concerned, I don't remember it being
19 discussed.

20 Q. Okay. Why don't we take a look at an exhibit
21 we've marked previously, 1054, this presentation by
22 Dr. Rodgman and Dr. Colby.

23 MR. AVRAM: It's this thing here.

24 Q. And why don't you specifically look at page
25 3493.

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1 MR. O'FALLON: And, Counsel, if you want to
2 help him get to that page, that would be appreciated.

3 MR. CRIST: It's page 3493.

4 THE WITNESS: 3493. Oh, okay. Uh-huh.

5 Q. Do you see that paragraph at the top up there?
6 Dr. Rodgman and Dr. Colby state, quote, "CONTRARY TO
7 THE VIEW THAT PM," quote, "'LUCKED,'" end quote,
8 "INTO THE HIGHLY SUCCESSFUL MARLBORO, IT IS LOGICAL
9 TO ASSUME THAT THE MARLBORO WAS A SYSTEMATICALLY
10 DESIGNED CIGARETTE INCORPORATING RESULTS FROM THE
11 BASIC BIOLOGICAL, BEHAVIORAL, AND PRODUCT RESEARCH PM
12 HAD CONDUCTED OVER A PERIOD OF MANY YEARS"; correct?

13 MR. CRIST: I object to the form of the
14 question.

15 A. I'm reading it, yes.

16 Q. They then state that "THE RESULTS FROM MORE
17 RECENT RESEARCH PERMIT PHILIP MORRIS TO SYSTEMICALLY
18 MODIFY THE MARLBORO IN A LOGICAL MANNER."

19 MR. CRIST: Same objection.

20 A. Okay.

21 Q. So these people, Dr. Rodgman and Dr. Colby,
22 apparently believed that Philip Morris is
23 intentionally modifying and manipulating nicotine and
24 other parameters of its cigarettes; correct?

25 MR. CRIST: Object to the form of the

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1 question. It calls for speculation.

2 A. But you notice in the -- in the second line it
3 says it's an assumption, "IT IS LOGICAL TO ASSUME."

4 Q. Well it's a logical assumption; correct?

5 A. But it's only an assumption.

6 Q. Well you can't know it unless you actually have
7 it --

8 A. No, you don't, huh-uh.

9 Q. Excuse me.

10 You couldn't physically know it unless you, R.J.
11 Reynolds, could actually go into Philip Morris's
12 laboratories and all of their previous documentation
13 and review it; correct?

14 MR. CRIST: Objection.

15 A. Right.

16 Q. Right. But as a competitor and as another
17 cigarette manufacturer and people with extreme
18 expertise in the manufacture of cigarettes, if it's
19 logical for anybody to assume or speculate or discuss
20 what Philip Morris is doing, it's you at R.J.
21 Reynolds; correct?

22 MR. CRIST: Objection, calls for
23 speculation.

24 MR. LAYDEN: Object to the form.

25 A. I think this is just an assumption.

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1 Q. R.J. Reynolds was very concerned about
2 Marlboro's increasing sales in the 1970s, weren't
3 they?

4 A. Definitely.

5 Q. It was taking millions, if not billions, of
6 dollars away from R.J. Reynolds; correct?

7 A. Yeah.

8 MR. CRIST: Object to the form.

9 Q. R.J. Reynolds did whatever it could to try to
10 figure out the secret of Marlboro; correct?

11 A. Well in my opinion, it was the horse.

12 Q. Excuse me?

13 MR. CRIST: I think that's a reference to
14 the Marlboro cowboy's horse.

15 MR. O'FALLON: Okay, okay.

16 Q. So in your opinion, it was really Marlboro's
17 advertising that caused its cigarette sales to
18 increase?

19 A. That had a lot to do with it.

20 Q. Which is why eventually R.J. Reynolds came out
21 with Joe Camel; correct?

22 MR. CRIST: Object to the form of the
23 question.

24 A. But, I mean, you're talking about much after I
25 left the company.

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1 Q. Right. I mean, and one of the problems with the
2 horse is that that horse was fairly successful in
3 convincing underage smokers to smoke; right?

4 MR. CRIST: Object to the form of the
5 question, calls for speculation.

6 A. Well that's not up to me to say "yes" or "no."
7 I'm not responding to that question.

8 (Discussion off the stenographic record.)

9 Q. And it's turned out over time that Joe Camel has
10 been equally successful at getting these underage
11 beginning smokers back into the R.J. Reynolds fold;
12 correct?

13 MR. CRIST: Object to the form of the
14 question. I also object on the basis that it calls
15 for speculation and improper opinion testimony on the
16 part of this witness.

17 A. Well we're talking now about promotion. I'm not
18 in a position to -- to comment on how one -- whether
19 one succeeds or not succeeds based on promotion.

20 Q. With all due respect, sir, when I asked you what
21 the real secret of Marlboro was, you said it was the
22 horse, and then you clarified that you meant that was
23 the advertising; correct?

24 A. Well we're -- you asked me about the success of
25 the Marlboro.

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1 Q. And you said it was the horse, meaning
2 advertising; correct?

3 A. It's conceivable.

4 Q. And that was your opinion as a research
5 chemist?

6 MR. CRIST: Objection.

7 Q. Correct?

8 A. That has something to do with it.

9 Q. And again I'm not trying to be flip here. You
10 were one of the people, you and your department were
11 charged in part with the goal of determining what
12 does make Marlboro successful; correct?

13 MR. CRIST: Object to the form of the
14 question, move to strike the gratuitous
15 introduction.

16 A. Our job in research was to study, analyze
17 competitive brands and attempt to develop cigarettes
18 to compete with that brand.

19 Q. And you determined ultimately that it was
20 advertising that played a --

21 A. I did not determine that. I didn't say that.

22 Q. Well that's what you testified here today.

23 A. I said it may have been.

24 Q. Well I don't recall a "may" being in your
25 answer, but if it was, the record will speak for

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1 itself.

2 A. Well, yeah.

3 Q. Another person who was charged in your
4 department with studying the whole notion of smoke pH
5 and nicotine impact was Dr. Claude Teague; correct?

6 A. Yes, uh-huh.

7 Q. As a matter of fact, was that one of
8 Dr. Teague's main areas of research?

9 A. Was that his what?

10 Q. One of his main areas of research.

11 A. Well actually at that time he was assistant
12 director of research, so he was assisting me in --
13 in -- in the overall research direction.

14 Q. So he was your second in command?

15 A. Yes, uh-huh.

16 Q. I'd like to show you a document that we've
17 previously marked as Plaintiffs' Exhibit 1058. It's
18 a document entitled "IMPLICATIONS AND ACTIVITIES
19 ARISING FROM CORRELATION OF SMOKE pH WITH NICOTINE
20 IMPACT, OTHER SMOKE QUALITIES, AND CIGARETTE SALES,"
21 Bates stamp numbered 51122 3463 through 3484.

22 MR. CRIST: Would it bother you if I stand,
23 Dan?

24 MR. O'FALLON: No.

25 MR. CRIST: My back is bothering me.

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1 MR. LAYDEN: 1058?

2 MR. CRIST: Previously marked, yeah.

3 MR. AVRAM: Dan, is there any indication on
4 here when this was done?

5 MR. O'FALLON: I don't believe there's a
6 date on it.

7 MR. AVRAM: I don't see one. I'm just
8 trying to --

9 MR. O'FALLON: I suspect we have that
10 information back in our database, which was provided
11 by RJR, but it appears sometime in 1972 since if you
12 look at some of the charts they are dealing with
13 numbers that go into like '71 and '72, specifically
14 if you look at the very last page.

15 MR. CRIST: It -- let me just suggest that
16 it may be like estimated at 1973. The reason I say
17 that is that there's a page, 3471, that is an excerpt
18 from evidently an article in "Tobacco Science" dated
19 December 15th, '72, which would kind of indicate to
20 me perhaps '73.

21 MR. O'FALLON: And again my suspicion is,
22 is that R.J. Reynolds knows the date of this document
23 and has probably provided that information to us in
24 the form of their 4B submission, so --

25 MR. AVRAM: I was just trying to determine

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1 whether it might have been on Dr. Senkus's watch or
2 not. That's all.

3 MR. O'FALLON: Well we can ask that.

4 BY MR. O'FALLON:

5 Q. Doctor, do you recognize this document?

6 A. Yes, uh-huh.

7 Q. Was this done during the time period that you
8 were director of research?

9 A. I would like to have a date on it.

10 Q. Well, sir, so would I, but I can only give you
11 what's been produced to me.

12 MR. CRIST: Well if the 4B index has it,
13 Dan, you probably have been provided it.

14 Q. You're copied on this document, aren't you,
15 sir?

16 A. Well if I am, then was -- yes, okay, I am.

17 Q. Okay. And you confirmed that by looking at page
18 3469; correct?

19 A. Yes.

20 Q. This is a document written by Dr. Teague;
21 correct?

22 A. Yes.

23 Q. And it's copied Dr. Murray Senkus; correct?

24 A. Right.

25 Q. So this is a document you would have received;

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1 correct?

2 A. Yes.

3 Q. Whose secret stamp is that? Is that

4 Dr. Teague's secret stamp that's on the front of the

5 document?

6 A. I don't know.

7 Q. How does it come to be that a document gets

8 marked "secret"?

9 MR. CRIST: Object to the form of the
10 question.

11 A. I don't know.

12 Q. Well at RJR --

13 I presume that this is an RJR stamp; correct?

14 A. Yeah, I guess it is, uh-huh.

15 Q. And that would have been done at the time this
16 memo was written, not subsequently; right?

17 A. I don't know when it was stamped in there.

18 Q. Who makes the determination of whether a
19 document should be categorized as secret? Is that
20 the author of the document? Is that you as the head
21 of the department? Who makes that determination?

22 A. I'm not familiar with this, the reason for this
23 stamp.

24 Q. And again, you're not familiar with the reason
25 for this stamp generically or just in context of this

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1 document?

2 A. Well in context of this document or any
3 document, if such a stamp were to be made.

4 Q. Okay. Let's look at page 466.

5 MR. AVRAM: Page two.

6 Q. At the top of that page under the section
7 entitled "SMOKE pH AND 'FREE' NICOTINE," Dr. Teague
8 states, quote, "In essence, a cigarette is a system
9 for delivery of nicotine to the smoker in" an
10 "attractive, useful form"; correct?

11 A. That's what it says.

12 Q. Okay. And you would agree with that; right?

13 A. That's what it says.

14 Q. Would you agree with that assertion?

15 A. No, I would not entirely.

16 Q. Again did you tell Dr. Teague that you thought
17 that was an inaccurate representation?

18 A. I did not. I did not want to dispute what he
19 said. It's not my practice to dispute what people
20 write. I have my own opinion. They have their
21 opinion.

22 Q. What's Dr. Teague's training?

23 A. What is he saying?

24 Q. What is his training?

25 A. He's a Ph.D. in organic chemistry.

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1 Q. Okay. Was he a good scientist?

2 A. Yes.

3 Q. You trusted him?

4 A. Yeah, I trusted him.

5 Q. He was actually your second in command at this
6 time?

7 A. Yes.

8 MR. CRIST: Objection, asked and answered.

9 Q. He then goes on to state, quote, "At 'normal'
10 smoke pH, at or below about 6.0, essentially all of
11 the smoke nicotine is chemically combined with acidic
12 substances, hence is non-volatile and relatively
13 slowly absorbed by the smoker"; correct?

14 A. Yes.

15 Q. And that's because nicotine is a base; right?

16 A. Yes.

17 Q. And as a base --

18 There's basically two types of these types of
19 substances: There's a base and acid; right?

20 A. Yes.

21 Q. 7 pH is the pH of water; right?

22 A. Yes.

23 Q. Basically neutral?

24 A. Yes.

25 MR. CRIST: I think you meant it is

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1 neutral, not basically neutral. I'm just
2 clarifying.

3 MR. O'FALLON: It is neutral.

4 MR. CRIST: Okay.

5 MR. O'FALLON: I don't think -- I don't
6 think we'll confuse the jury with that question.

7 BY MR. O'FALLON:

8 Q. A pH below 7 would mean it's acidic; correct?

9 A. Yes.

10 Q. A pH above 7 is usually thought of as basic;
11 correct?

12 A. Yes, uh-huh.

13 Q. So what he's saying is that a pH of 6, which is
14 fairly acidic, the majority of the smoke -- strike,
15 of the nicotine remains bound in a salt form;
16 correct?

17 MR. CRIST: Object to the form of the
18 question.

19 A. Yes.

20 Q. And that's how nicotine naturally occurs, as a
21 salt; right?

22 A. Yes.

23 Q. That is, you've got nicotine, a base, combined
24 with an acid to form a salt; right?

25 A. Uh-huh.

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1 THE REPORTER: Your answer?

2 A. Yes.

3 Q. He then states "As the smoke pH increases above
4 about 6.0, an increasing proportion of the total
5 smoke nicotine occurs in 'free' form"; correct?

6 A. That's what it says.

7 Q. "Which is volatile," which means what?

8 A. It's in free form.

9 Q. Okay. "Rapidly absorbed by the smoker, and
10 believed to be" instantaneously "perceived as
11 nicotine 'kick'"; correct?

12 A. Uh-huh.

13 MR. CRIST: Excuse me, I think you misread
14 that.

15 Q. "As the smoke pH increases above about 6.0, an
16 increasing proportion of the total smoke nicotine
17 occurs in 'free' form, which is volatile, rapidly
18 absorbed by the smoker, and believed to be instantly
19 perceived as nicotine 'kick'"; correct?

20 A. That's what he says.

21 Q. Yeah. And you don't disagree with that, do
22 you?

23 A. Yes, I do.

24 Q. You didn't tell him that at the time, though,
25 did you?

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1 A. I didn't have to.

2 Q. And you didn't write any memo that said you
3 disagreed with that?

4 A. It wasn't necessary.

5 Q. You were his boss. You could have done that?

6 MR. CRIST: Objection. You're arguing with
7 him.

8 A. I would interpret this kick as a -- the right
9 taste. That's what I would --

10 Q. That's not what he says, though, is it?

11 A. Well, I don't know what he meant by "kick."

12 Q. Did you ask him?

13 A. Why should I? It wasn't --

14 Q. Well usually when you don't understand
15 something --

16 A. It would not be necessary at every instance --

17 MR. O'FALLON: I'm getting tired of you
18 putting out your hand.

19 MR. CRIST: No, no, no, you were
20 interrupting.

21 MR. O'FALLON: Do you understand that?

22 MR. CRIST: You interrupted him. Don't
23 interrupt him, Dan, please.

24 MR. O'FALLON: One more time, we're going
25 to the judge. You're all over here. You want a

1 standing objection to every question I ask, I'll give
2 you a standing objection to every question I ask.

3 MR. CRIST: Don't interrupt the witness's
4 answer, please.

5 MR. O'FALLON: Don't interrupt me again.
6 Do you understand that?

7 MR. CRIST: Will you do that? Will you not
8 interrupt the witness's answer?

9 MR. O'FALLON: Go back and read back my
10 question, please.

11 (Discussion off the stenographic record.)

12 BY MR. O'FALLON:

13 Q. Usually when you don't understand something, you
14 go and ask the author to clear it up; right?

15 A. It's not a question of whether I understood it.
16 It's a question of this is the way he expresses it,
17 and it would not be my -- it would not be proper even
18 to go -- to -- to try to correct him to change his --
19 change his phrase -- phraseology.

20 Q. Let's look back at page 3479.

21 A. 3479?

22 Q. Right.

23 A. That's beyond 66?

24 Q. Right. Well actually, if you look back where
25 you were at on page two --

- 1 A. Yeah.
- 2 Q. -- he refers to a Chart VIII that shows how
- 3 proportion of free nicotine increases as pH goes
- 4 higher, and I'm actually sending you back to that
- 5 chart.
- 6 A. Yeah. Okay, uh-huh, I see that.
- 7 Q. And I -- the number I was using is the Bates
- 8 stamp number, 3479.
- 9 A. Yeah.
- 10 Q. Okay.
- 11 A. Okay.
- 12 Q. Do you see that chart?
- 13 A. I see it right here.
- 14 Q. Okay. What he's indicating here is that
- 15 basically free nicotine is a function of pH;
- 16 correct?
- 17 A. Yes.
- 18 Q. Okay. And at the bottom he's got along that
- 19 lower axis the percentage of nicotine that is free;
- 20 correct?
- 21 A. Yes.
- 22 Q. Okay. And it looks like at up about pH of 7
- 23 he's showing approximately 15 percent of that
- 24 nicotine is free; correct?
- 25 A. At pH 7 -- no, pH 7, it would be about 20

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- 1 percent.
- 2 Q. Okay.
- 3 A. According to this graph.
- 4 Q. Okay. I'm just trying to get -- again I'm
- 5 making an approximation. I can't tell exactly --
- 6 A. Okay, okay, I'm reading it based on the chart
- 7 here.
- 8 Q. Okay. Well so as you read it, it's about 20
- 9 percent of the nicotine --
- 10 A. At pH 7, that's what he says.
- 11 Q. Okay. So again this is the -- the second or
- 12 third researcher that's concluded that there's a
- 13 fairly high proportion of nicotine --
- 14 A. At pH 7, uh-huh.
- 15 Q. -- that's free at pH 7; correct?
- 16 MR. CRIST: Object to the form.
- 17 Q. Correct?
- 18 A. Yes, uh-huh.
- 19 Q. He also talks about the effects on the smoker as
- 20 the percentage of free nicotine increases; correct?
- 21 A. As the pH increases.
- 22 Q. Right. And as the free nicotine increases;
- 23 right?
- 24 A. Uh-huh.
- 25 Q. And what he states is that in the area of higher

1 pH and higher nicotine, you have rapid nicotine
2 absorption; correct?

3 A. When you say "rapid nicotine absorption," it's
4 not stated here where nicotine absorption.

5 Q. But that is what's stated on that document,
6 isn't it?

7 A. Yeah, uh-huh.

8 Q. Okay. Presumably it would be wherever the
9 nicotine has contact; correct?

10 A. You see, the thing is this: In the short time
11 that the nicotine spends in the mouth when you
12 inhale, there would be very little nicotine
13 absorbed.

14 Q. The fact of the matter is, though, wherever the
15 nicotine's absorbed, free nicotine is going to be
16 absorbed quicker than bound nicotine; correct?

17 That's what he's stating?

18 A. That's what he's stating.

19 Q. Right. And that would be true whether it's in
20 the mouth; right?

21 A. Yeah.

22 Q. Or whether it's in the lung; right?

23 A. Well you're talking about two different
24 situations there, totally different situation, mouth
25 and lung.

1 Q. But in either event, free nicotine in either
2 place, whether it be the lung or whether it be the
3 mouth or whether it be the nose, free nicotine is
4 going to be absorbed more readily than bound
5 nicotine; correct?

6 MR. CRIST: Objection.

7 A. In the mouth, but regardless of the speed of
8 absorption, but the amount of absorption in the mouth
9 is insignificant.

10 Q. But the amount of absorption in the lung is
11 tremendous; --

12 A. Yeah.

13 Q. -- correct?

14 And in either place, whether it be the mouth or
15 the throat or the nose or the lung, free nicotine
16 will be absorbed more readily than bound nicotine?

17 MR. CRIST: Objection, asked and answered.

18 A. You have to differentiate between mouth and
19 lung.

20 Q. Will it or will it not, free nicotine, be more
21 readily absorbed in the lung?

22 A. In the lung?

23 Q. Yes.

24 A. Well in the lung you have an entirely different
25 situation.

1 Q. Will it be absolved more readily in the lung?

2 A. Actually absorption of nicotine in the lung

3 is -- at all has nothing to do with pH. It has

4 nothing to do with pH.

5 Q. Will free nicotine in the lung be more readily

6 absorbed than bound nicotine?

7 MR. CRIST: Objection, been asked and

8 answered.

9 A. Well in the lung absorption of pH is not --

10 absorption of nicotine is not pH dependent.

11 Q. That's not my question.

12 Will free nicotine be more readily absorbed in

13 the lung than bound nicotine?

14 MR. CRIST: Same objection.

15 A. Well if you examine the situation in the lung,

16 there is no bound nicotine in a -- in a lung.

17 Q. There's bound nicotine that's bound before it

18 hits the lung; correct?

19 A. As it's traveling into the lung?

20 Q. Sure.

21 A. I don't get your picture.

22 Q. You've still got free nicotine and bound

23 nicotine going into the lung; correct?

24 A. Well --

25 Q. At various smoke pHs, you still have free

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1 nicotine and bound nicotine going into the lung?

2 A. Well, would -- when it gets into the lung and
3 gets on the surface of the lung, the pH is 7, it's
4 rapidly transported there.

5 Q. I understand that in the lung all the nicotine
6 will eventually be absorbed. My question is: In the
7 race to the brain, is the free nicotine that's
8 already free in the smoke going to make it there
9 quicker than the bound nicotine?

10 MR. CRIST: I object to the form of the
11 question.

12 A. Well whenever -- whenever any nicotine is
13 transferred, it quickly goes into the blood.

14 Q. And in order to be transferred, it needs to be
15 free and unbound; correct?

16 A. I really -- we're looking at it, I guess, from a
17 different perspective. I -- I really don't
18 understand your question. In other words, at no
19 point here are we talking about nicotine in the
20 lung. This is -- to a large extent, we're talking
21 about nicotine in the mouth.

22 Q. Where does it say here that we're only talking
23 about nicotine in the mouth?

24 A. No, no, I think the --

25 Q. You want to show me that? I must have missed

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1 that.

2 A. No, no, no, but this is my interpretation.

3 Q. Well but where does the document state that?

4 A. It doesn't need to say it. We're talking about
5 taste of nicotine, of -- of the smoke. It's in the
6 mouth. You taste in the mouth. You don't taste it
7 in the lung.

8 Q. You're talking about that, sir. Where does this
9 document state that it's talking solely about
10 absorption in the mouth?

11 MR. CRIST: Objection to the form of the
12 question.

13 Q. Please -- please show me that if I've missed
14 it. Can you show me that?

15 A. I guess we need to turn this whole thing around
16 and start from what -- I don't understand your
17 questions.

18 Q. I'm asking you where in this document it says
19 that Dr. Teague is only talking about the mouth. Can
20 you show me that, please, sir.

21 A. Well we're talking about taste. This graph you
22 see on 79, as far as I'm concerned, is dealing only
23 with the mouth.

24 Q. Where does it say that, sir?

25 A. It doesn't need to say it. That's my

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1 interpretation.

2 Q. Where does it say the mouth anywhere on here?

3 MR. CRIST: Objection to the form.

4 A. It doesn't have to say it. This is my

5 interpretation.

6 Q. Where does it say this is solely limited to the

7 effect of nicotine in the oral cavity at all?

8 A. You have to take my word for it.

9 MR. CRIST: Objection.

10 A. This is my --

11 Q. So in other words, you can't show me anyplace

12 where this says this is only related to the mouth;

13 right?

14 MR. CRIST: Objection.

15 A. Well we're talking about taste.

16 Q. Okay, I'm sorry. Where does it specifically say

17 we're only talking about taste?

18 MR. CRIST: Objection. You're getting

19 argumentative. It's been asked and answered about 15

20 times.

21 MR. O'FALLON: Well I'm trying to get at --

22 you know, I'm being told that a document says

23 something. I just want to know where.

24 MR. CRIST: Do you want him to take --

25 excuse me. He's given you his interpretation, Dan.

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1 Do you want him to take time now to read it carefully
2 and see whether or not the word "oral cavity" or
3 "mouth" is referred to in here?

4 MR. O'FALLON: He's made his testimony.
5 Presumably he feels he's had enough time with the
6 document to make that testimony. I just want to know
7 where he's seeing that.

8 MR. CRIST: I didn't think he'd said that
9 he'd seen it. I think he'd said that was his
10 interpretation, but perhaps it's in here as well.

11 While he's doing that, you indicated that you
12 were going to adjourn at about 4:30?

13 MR. O'FALLON: Yeah.

14 MR. CRIST: I think we're there. That's
15 why I asked you.

16 MR. O'FALLON: Since we've had a colloquy
17 on the record between the time of my question, I just
18 want to go back and restate my question.

19 BY MR. O'FALLON:

20 Q. Doctor, can you point me to anyplace here where
21 it says that this document relates solely to the
22 mouth or taste?

23 A. The work that was being done to -- let's say to
24 match the Marlboro -- okay. Now listen carefully.
25 The work that -- I'll answer the question this way:

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1 The work that was being done to match the Marlboro,
2 as far as I'm concerned, had to do only with taste,
3 and the only place you taste is in the mouth. You
4 taste in the mouth. You don't taste in the lungs.

5 Q. You got a --

6 A. So --

7 Q. Do you have a document somewhere that says that,
8 sir?

9 A. Beg your pardon?

10 Q. Do you have a document somewhere that says
11 that?

12 MR. CRIST: Objection to the form of the
13 question.

14 A. Well I -- this is my opinion. My -- my -- my
15 opinion as -- as my years of experience with
16 smoking, --

17 Q. Well --

18 A. -- it had to do with taste. You taste in the
19 mouth. Taste buds are in the mouth.

20 Q. Taste also has to do with the nicotine impact,
21 that kick, that physiological kick; correct?

22 MR. CRIST: Objection.

23 A. That's -- that's a totally different thing. The
24 impact on the brain is one thing. The taste in the
25 mouth is something else.

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1 Q. In any event, when Dr. Teague wrote this, he
2 concluded on page 465 that all evidence indicated
3 that the relatively high smoke pH, high alkalinity,
4 shown by Marlboro and other Philip Morris brands and
5 Kool is deliberate and controlled; correct? Look on
6 page 465.

7 A. 465.

8 Q. Bottom paragraph.

9 A. Here it is. Yeah, okay. That's what it says.

10 Q. You agree with that?

11 MR. CRIST: Objection, calls for improper
12 opinion testimony.

13 MR. O'FALLON: Do you just want a standing
14 objection to everything I ask?

15 MR. CRIST: No. Every once in a while you
16 ask an unobjectionable question.

17 A. "All evidence indicates that the relatively high
18 smoke pH (high alkalinity) shown by Marlboro (and
19 other Philip Morris brands) and Kool is deliberate
20 and controlled." Now, evidence indicates that
21 Marlboro success is based on, shall we say, pH that
22 delivers the right taste is the way I would interpret
23 that, and so it's -- to that extent, it's -- it's
24 controlled.

25 Q. Does it say "taste" there, sir?

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1 A. Huh?

2 Q. Does it say "taste" there anywhere in that

3 paragraph?

4 A. No, it does not. No.

5 Q. You're just reading that in now as you sit here

6 some 20 years later; right?

7 A. See, I would not agree with this high alkalinity

8 because there again it doesn't quite agree what he

9 says in that chart, because the high alkalinity comes

10 above pH 7 and -- and pH of Marlboro is not -- is

11 below 7, as near as I can remember.

12 Q. Well his basic point, though, is that as you

13 increase -- increase pH, you increase free nicotine;

14 right?

15 A. Repeat your question, please.

16 Q. Why don't you read it back.

17 (Record read by the court reporter.)

18 A. Yes, that's true.

19 MR. O'FALLON: Why don't we end for today.

20 We'll pick up tomorrow.

21 THE REPORTER: Off the record, please.

22 (Deposition recessed at 4:30 o'clock

23 p.m.)

24

25

1 C E R T I F I C A T E

2 I, William C. LaBorde, hereby certify that
3 I am qualified as a verbatim shorthand reporter; that
4 I took in stenographic shorthand the testimony of
5 MURRAY SENKUS at the time and place aforesaid; and
6 that the foregoing transcript consisting of pages 1
7 through 264, Volume I, is a true and correct, full
8 and complete transcription of said shorthand notes,
9 to the best of my ability.

10 Dated at Winston-Salem, NC, this 16th day
11 of June 1997.

12

13

14

15 WILLIAM C. LaBORDE

16 Registered Professional Reporter

17 Notary Public

18

19

20

21

22

23

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25

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1 C E R T I F I C A T E

2 I, MURRAY SENKUS, the deponent, hereby
3 certify that I have read the foregoing transcript
4 consisting of pages 1 through 264, Volume I, and that
5 said transcript is a true and correct, full and
6 complete transcription of my deposition, except per
7 the attached corrections, if any.

8

9 (Please check one.)

10

11 ____ Yes, changes were made per the attached
12 (no.) ____ pages.

13

14 ____ No changes were made.

15

16

17 MURRAY SENKUS

18 Deponent

19

20 Sworn and subscribed to before me this day
21 of 199__.

22

23

24 Notary Public

25 My commission expires: (WCL)

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